Journal of Youth Development

Bridging Research & Practice

Volume 6, No.2, Summer 2011

Journal of Youth Development
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Summer 2011

Volume 6 Number 2

Editor's Comments:

Our Summer Issue brings readers an overview of several innovative youth development programs and evaluation techniques. Highlights include a study on reducing childhood obesity, an examination of why youth join or leave youth programs, poverty stimulations and an innovative after school program for at risk youth.

Manuscripts for the Winter 2011 thru Summer 2012 Issues are now being accepted. The Publication Committee has increased the word count for manuscripts as noted below:

- **Feature Articles** ~ informational, explanatory, or critical analysis and interpretation of major trends or comprehensive reviews. Include clear implications for youth development practice and programming. 2,000-5,000 words
- **Program Articles** ~ discuss programs and outcomes or describe promising programs and pilot projects that have clear implications for youth development research, practice and programming. 1,500-4,000 words
- **Research and Evaluation Strategies** ~ describe innovative methodologies and strategies in the collection and analysis of quantitative or qualitative research and evaluation data. 1,500-4,500 words
- **Resource Reviews** ~ present analyses of materials, such as books, curricula or videos. 300-800 words

Publication Committee

JOURNAL OF YOUTH DEVELOPMENT
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Volume 6, Number 2
Summer 2011

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Investigating the Utilization of Research Evidence in the 4-H Youth Development Program [Article 110602FA002]
Bikos, Lynette H.; Kocheleva, Julia A.; Campbell, Twyla; Daryani, Ritesh; Chahil, Sandeep; Brown, Terran; Winbeg, Yolanda; Pavese, Liz
This study investigated the acquisition, interpretation, and utilization of research evidence in the 4-H Youth Development Program from the frame of Social Cognitive Theory. Utilizing Consensual Qualitative Research, we interviewed twenty 4-H faculty, staff, and volunteers from seven states. Results indicated four domains, which covered participants' definitions of research utilization, their experiences utilizing research, the process of acquiring and distributing research, and barriers and facilitators to research utilization. Participants described research use primarily in terms of improving 4-H programs. They discussed their level of confidence (i.e. self-efficacy) in finding and applying research evidence and their beliefs about the outcomes of research utilization (i.e. outcomes expectancy). Participants mentioned such barriers as not knowing where to look for research, lack of time, lack of funding, and difficulty applying research findings to their work. The facilitators included support from other 4-H colleagues and availability of 4-H specific conferences, publications, and curriculum databases.

Examining the Reasons and Relationships Between Why Youth Join, Stay in, and Leave 4-H [Article 110602FA003]
Harrington, Rebecca; Sheehan, Trisha; Blyth, Dale
While the Minnesota 4-H Club program has grown over 29% in the last six years, annually over 25% of youth do not re-enroll. The Minnesota 4-H Retention Study asked youth who left the program why they decided to join, stay and ultimately leave 4-H. Data from 220 youth were

examined to better understand the reasons for and relationship between youth joining and staying in 4-H and their reasons for leaving 4-H. Youth joined 4-H because they wanted to have fun, try new things, and participate in projects and fairs. Top reasons they stayed in 4-H were they liked being with other kids, had fun, and learned new things. Primary reasons youth left were they lost interest in 4-H or became involved in other activities. Examining the relationships revealed that paying particular attention to youth experiences in project learning and teaching, relationships with adults, and youth having fun will increase retention.

School Sponsored Extracurricular Activities and Math Achievement among Hispanic Students [Article 110602FA004]

Espinoza, Jose A.

Differences in math achievement between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities at an inner-city campus in the State of Texas were examined for the 2008-2009 academic year. The Texas Assessment of Knowledge and Skills (TAKS) Math exam served as the measure of student achievement. Hispanic eighth grade students who were involved in extracurricular activities had statistically significantly higher scores as well as higher passing percentages than did Hispanic eighth grade students who were not involved in extracurricular activities on the TAKS Math exam. Implications are presented and recommendations for future research are made.

Factors Influencing 4-H Club Enrollment and Retention in Georgia [Article 110602FA005]

Defore, Amber B.; Fuhrman, Nicholas E.; Peake, Jason B.; Duncan, Dennis W.

Middle school aged 4-H member participation is on the decline across the nation. Research has identified reasons for declining 4-H club participation, including conflicting time commitments (with school and community activities) and opinions that the program was boring or for little kids. This study sought to gain a clearer understanding of why 4-H member involvement in Camden County, Georgia has steadily declined in recent years. The most prevalent reason listed for leaving the Camden County 4-H program was that the 4-H meeting conflicted with school and community activities. Other reasons listed included wanting to be with friends in a relaxed setting, not liking the activities and lessons at the special interest club meetings, and not feeling welcome in the 4-H club meetings. The 4-H members who continued with the program had 100% parental involvement – the number one indicator of continued 4-H participation.

Program Articles

Using Poverty Simulation for College Students: A Mixed-Methods Evaluation [Article 110602PA001]

Todd, Maureen; de Guzman, Maria Rosario T.; Zhang, Xiaoyun

This paper speaks to the potential for simulation and experience-based educational programs in delivering changes in knowledge, attitudes and behaviors, as well as the utility of mixed-methods approaches to program evaluation. The authors discuss a mixed-methods study which evaluates the impact of a poverty simulation program on college students at three Midwestern universities. Findings suggest multiple benefits of the experience, including changes in attitudes and beliefs about how serious the experience of poverty can be, an understanding that poverty is complex and can be caused by multiple factors, and a decrease in their biases and stereotypes about people in poverty. Qualitative findings corroborate these data.

Parental Perceptions of Participation in 4-H Beef, Sheep and Swine Livestock Projects and the Fostering of Life Skill Development in Youth [Article 110602PA002]

Heavner, Janice; Hicks, Kelly; Nicodemus, Shanna

Beef, sheep and swine 4-H youth livestock projects have a great deal of hands-on learning opportunities for members. However, what are parents' perceptions about livestock projects and the development of life skills? The purpose of this research effort was to determine the life skill development gained by 4-H members participating in 4-H beef, sheep or swine projects in West Virginia. A total of 207 caregivers offered insight into the study and answered life skill development questions. These questions were related to decision making, relating to others, developing and maintaining records, accepting responsibility, building positive self esteem, self motivation, knowledge of the livestock industry, developing organizational skills, problem solving, developing oral communication skills, setting goals, developing self-discipline, and working in teams. The findings of this study provide positive insights into the relationship between the development of valuable life skills and 4-H beef, sheep and swine projects.

Projects in a Day Develop Life Skills in At-Risk After School Youth [Article 110602PA003]

Hoffman, Katie J.

As budgets tighten and school weeks are shortened more youth are being left unattended at home. Rural youth are particularly affected by these reductions and stranded away from programs and resources. At-risk youth are acutely impacted as they lose contact time with programs that provide life skill development and a safe place for youth to connect to community, other youth and adults. 4-H Projects-in-a-Day can provide curriculum in partnership with after school programs that develop life skills and build positive social skills. In a study conducted with an Idaho After School program during the 2007-2008 and the 2008-2009 school years, six of the 12 life skills evaluated showed a significant increase after participation. Youth also reported positive self esteem and made new friends during the events held on Fridays. 4-H Project-in-a-Day curriculum has shown to be a powerful, ready to use tool in after school programming.

Resource Review

The Annie E. Casey Foundation 2010 KIDS COUNT Data Book: State Profiles of Child Well-Being [Article 110602RR001]

Dawson, Patricia

The 2010 KIDS COUNT Data Book: State Profiles of Child Well-Being is an excellent resource for youth development professionals. The Data Book, prepared by the Annie E. Casey Foundation, provides national as well as state-by-state information on the conditions of America's children and families. Ten key indicators of child well-being are utilized for the state rankings. In addition, the book includes an Appendix highlighting 10 years of state-by-state rankings using key indicators of child well-being.

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Parenting Practices that can Prevent or Reduce Childhood Obesity

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JOURNAL OF YOUTH DEVELOPMENT
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Volume 6, Number 2, Summer 2011 **Article 110602FA001**

Parenting Practices that can Prevent or Reduce Childhood Obesity

Galen Eldridge, Wesley Lynch, Sandra Bailey, Carrie Benke,
Jill Martz and Lynn Paul
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Abstract: Overweight in children is more prevalent than ever before. What can parents do to try to promote health and prevent obesity in their own children? The present paper reviews research related to parenting and childhood obesity. The review describes what food-related parenting practices may be helpful: modeling healthy eating behaviors, making time for family meals, making sure healthy food is available and accessible, becoming aware of appropriate portion sizes, encouraging children to eat breakfast, and limiting soda and fast food intake. The paper also discusses food-related parenting practices that may not work to help prevent obesity: pressure to eat, food rewards, restriction, permissiveness, and modeling of unhealthy eating behaviors. Additional parenting practices such as supporting and engaging in physical activity, encouraging an adequate amount of sleep, and limiting television and other screen-media may also help children to maintain healthy weights. Suggestions are also given for professionals working with youth.

Introduction

Childhood obesity rates are at an all-time high and the general food environment is becoming increasingly conducive to eating more often, eating larger amounts, and eating more unhealthy foods. The goal of all parents is to raise healthy children, so what does recent research suggest works for them to provide a healthy food and activity environment for their family? This paper will review research related to parenting and childhood obesity. A discussion about what does work will be followed by what research has documented does not work to prevent or reduce childhood obesity. Implications for professionals working with youth will also be discussed.

Rationale

Children today are less physically active and have less healthy diets than 25 years ago. Overweight children have numerous risk factors for cardiovascular disease, including high cholesterol, high blood pressure, and abnormal glucose tolerance. The causes of childhood obesity range from genetics, to environmental factors in homes, communities and schools, to economic influences of the food industry, to social and public policies. Because parents provide the most important psychosocial influences in the lives of children, making parents aware of factors they can control through resource-management, specific parenting practices, and role modeling will strengthen their positive influence, ultimately leading to a healthier lifestyle and beneficial long-term health consequences for children and families.

Types of research

Which kinds of studies provide the best evidence that a parenting practice is related to childhood obesity? There are various types of research design: laboratory experiments, in which one or two meals or snacks may be offered in various conditions; cross-sectional studies, which involve measurements or questionnaires at one time point; longitudinal or prospective studies, which involve measurements or questionnaires at two or more time points; and field experiments, in which a specific intervention is tested against another condition or against a no-intervention control. Of these, field experiments provide the strongest evidence that a specific factor has a significant influence on childhood obesity, with long-term longitudinal studies providing the next strongest evidence (Ventura & Birch, 2008).

Eating practices and behaviors that may work to prevent or reduce childhood obesity

There are many food-related practices that parents can model and encourage in order to promote healthy behaviors in their children. Some of these practices arise from authoritative, authoritarian, and permissive parenting styles (Baumrind, 1989) and corresponding parental feeding styles (Hughes, Power, Fisher, Mueller, & Nicklas, 2005). The three types of parenting and feeding styles are: authoritative (firm, but warm and accepting), authoritarian (strict disciplinarians), and permissive (responsive, but not demanding). Of the three styles, authoritative parenting and feeding generally result in the most effective parental feeding practices.

Recommended authoritative parenting practices include making time for family meals, making sure healthy foods are more available and accessible than unhealthy foods, using preparation methods children prefer for healthy foods, assuring appropriate portion sizes, encouraging children to eat breakfast, minimizing soda and fast food consumption, and preparing and offering nutrient-dense, rather than energy-dense foods.

Family meals

Eating more meals in a family group has been correlated with higher diet quality (Woodruff, Hanning, McGoldrick & Brown, 2010). In this case, dietary quality was calculated from 24-hour dietary recalls using the Healthy Eating Index, a measure of diet quality that assesses conformance to federal dietary guidance (Woodruff, et al., 2010). More specifically, eating family meals more frequently is correlated with greater intakes of fruits and vegetables, dairy products, vitamins, and minerals and consuming fewer soft drinks (e.g., Neumark-Sztainer, Larson, Fulkerson, Eisenburg, & Story, 2010; Verzeletti, Maes, Santinello, Baldassari, & Vereecken, 2010; Woodruff & Hanning, 2008). Vegetables and dairy products served at family dinners have been shown to predict intake of vegetables and dairy products for youth five years

later (Arcan, et al., 2007). Although children who eat family meals tend to have higher diet quality, watching television during family meals reduces or negates this benefit (Feldman, Eisenberg, Neumark-Sztainer, & Story, 2007; Fitzpatrick, Edmunds, & Dennison, 2007).

Most studies find that a greater proportion of family meals is associated with a lower prevalence of overweight among children (See reviews: Rhee, 2008; Woodruff & Hanning, 2008). In one prospective study, children who ate fewer family meals were more likely to be overweight three years later (Gable, Chang, & Krull, 2007).

It seems to make sense to recommend that families who eat meals together and who refrain from watching television during the family meal continue these practices. The parenting practice that seems to best support this recommendation is authoritative; parents are firm about eating together and not watching TV, but create a warm and supportive environment around the family table. It is also recommended that families who rarely eat together try to make time for more family meals.

Availability of healthy or unhealthy foods

Longitudinal and cross-sectional studies both show that exposure to and availability and accessibility of healthy foods can increase the preference for and intake of these foods (Pearson, Biddle, & Gorely, 2009; Ventura & Birch, 2008; Wind, te Velde, Brug, Sandvik, & Klepp, 2010). Conversely, research has also shown that a permissive style of parenting that allows for availability of unhealthy food products at home is linked to children eating more total fat, sugar, and 'junk food,' and consuming more soft drinks (Gable & Lutz, 2000; Haerens, et al., 2008; McClain, Chappuis, Nguyen-Rodriguez, Yaroch, & Spruijt-Metz, 2009).

There are a variety of ways that parents can make healthy foods more accessible for children. These include strategies such as making sure that fruits and vegetables are available at various locations around the house, placing fruits and vegetables where children can easily reach them, preparing fruits and vegetables in sizes that are easy for children to eat, using fruits and vegetables for snacks instead of things like cookies and chips, including some form of fruit or vegetable in most meals, and buying fruits or vegetables instead of 'junk food' (O'Connor, et al., 2010). Giving children a choice between various fruits and vegetables will also help increase children's intake of these foods (Zeinstra, Koelen, Kok, van der Laan, & de Graaf, 2010). Another study found that children who shop for fruits and vegetables with their parents eat more of these foods (Gross, Pollock, & Braun, 2010).

Preparation method

The specific preparation method and resulting taste and texture of fruits and vegetables also affect how willing children are to eat them. For example, children tend to like crisp, crunchy, mild-tasting, and sweet vegetables and dislike strong and bitter tasting cooked ones (Sondergaard & Edelenbos, 2007). They may also like vegetables served alone as a side dish, rather than in a mixed dish (Sondergaard & Edelenbos, 2007). Although parents are encouraged to expose children to a variety of fruits and vegetables and preparation methods, they are also encouraged to take into consideration children's unique taste preferences. Negotiating and being willing to compromise are authoritative parenting practices.

Portion size

One study found that most children under the age of three will not eat a larger amount of food when they are served larger portions but that by the age of five this is no longer true (Rolls, Engell, & Birch, 2000). However, another study found that children as young as two years old

will eat more if they are served larger portions (Fisher, 2007). Parents need to be aware of the importance of portion sizes and what portion sizes are appropriate for their children.

One strategy for increasing the amount of fruits and vegetables eaten is to serve a larger portion of these foods, either as a first course or as a side dish (Kral, Kabay, Roe, & Rolls, 2010; Spill, Birch, Roe, & Rolls, 2010). Of course, serving smaller portions of desserts or other high calorie foods is also recommended. It is also recommended that parents model using internal cues for eating by cuing in to hunger as the signal to eat and fullness as the cue to stop eating. These internal cues of eating offer lifelong strategies to limiting portion sizes versus external cues of eating, such as cleaning the plate, as a cue to stop eating.

Breakfast

Breakfast eaters have higher daily intakes of vitamins and minerals and are more likely to meet nutrient intake recommendations than those who skip breakfast. (Rampersaud, Pereira, Girard, Adams, & Metzl, 2005) Breakfast-skipping children and adolescents may have a lower diet quality overall than those who do not skip breakfast (Dubois, Girard, Kent, Farmer, & Tatone-Tokuda, 2009; Storey, et al., 2009). This may be because those who skip breakfast do not 'make up' the missed nutrients later in the day.

A large number of cross-sectional studies have found that children and adolescents who often skip breakfast are more likely to be overweight than those who regularly eat breakfast (See reviews: Rampersaud, et al., 2005; Szajewska & Ruszczynski, 2010). Prospectively, studies have found that adolescents who ate breakfast more often were less likely to be overweight or to have an increase in body mass index-for-age scores (BMI z-scores) or to become overweight 4-5 years later (Haerens, Vereecken, Maes, & de Bourdeaudhuij, 2010; Merten, Williams, & Shriver, 2009; Niemeier, Raynor, Lloyd-Richardson, Rogers, & Wing, 2006; Timlin, Pereira, Story, & Neumark-Sztainer, 2008). For example, one study found a significant inverse relationship between BMI z-score and frequency of breakfast consumption when students were measured over four years, from age 10 to age 14 (Haerens, et al., 2010).

Lack of time, lack of hunger, and lack of appeal are some of the reasons kids give for not eating breakfast. An excellent idea for school nights is for parents to ask their kids to talk about what would be appealing for breakfast and possibly prepare healthy 'on-the-go' breakfasts together for the next morning. Again, this is an example of an authoritative parenting practice.
Some studies have found that lower meal frequency in general, or skipping meals, rather than simply skipping breakfast, is correlated with greater overweight or obesity (See reviews: Koletzko & Toschke, 2010; Patro & Szajewska, 2010). In general parents should discourage children from skipping meals for any reason, but especially as a weight control strategy. Contrary to expectation, skipping meals does not prevent weight gain and may produce the opposite result.

Soft drinks and other sugar-sweetened beverages

Recent reviews have summarized evidence showing a detrimental effect of soft drink consumption on body weight in childhood (Harrington, 2008; Libuda & Kersting, 2009; Must, Barish, & Bandini, 2009). Although some studies have focused only on soft drinks, others have also included other sweetened beverages such as 'fruit drinks,' sports drinks, sweetened tea, and other beverages that contain added sweeteners. In one study, which included beverages other than soft drinks, sweetened beverage intake at age 5 was positively associated with overweight at ages 5, 7, 9, 11, 13, and 15 (Fiorito, Marini, Francis, Smiciklas-Wright, & Birch, 2009).

Some intervention studies have shown that a reduction in soft drink consumption by as little as one-third cup per day can lead to a reduction of overweight and obesity (Ebbeling, et al., 2006; James, Thomas, Cavan, & Kerr, 2004). For example, a 1-year randomized trial in which one group of children decreased the consumption of sugar-sweetened carbonated beverages by one-third cup per day resulted in a significant reduction of overweight compared to a comparable group of children who did not receive the intervention (James, et al., 2004).

Soft drinks should be discouraged as an 'every day' beverage, especially for young children. But instead of completely eliminating soft drinks, which would be considered an authoritarian parenting practice, parents could offer them occasionally to older children, reflecting an authoritative style of parenting. Parents may want to discourage children's regular consumption of other sweetened beverages as well; examples of these include sports or 'energy' drinks, 'fruit drinks' that contain less than 100% fruit juice, and sweetened tea or coffee.

Fast food

Fast food consumption is unequivocally associated with higher energy intake, making children more susceptible to weight gain and obesity, according to a recent review (Rosenheck, 2008). Both cross-sectional and prospective studies have come to this conclusion (See review: Rosenheck, 2008; Viner & Cole, 2006). Children who eat more fast food not only consume more total calories, they also consume more fat and sugar-sweetened beverages and less fiber, milk, fruit and non-starchy vegetables (See reviews: Newby, 2007; Rosenheck, 2008). Similarly, individual children consume more total energy and have poorer diet quality on days with, compared to days without, fast food (Bowman, Gortmaker, Ebbeling, Pereira, & Ludwig, 2004; Paeratakul, Ferdinand, Champagne, Ryan, & Bray, 2003).

Convenience, low cost, and taste appeal of high-fat, high-sugar foods contribute to the popularity of fast foods. A suggestion for parents is to plan ahead, making sure the ingredients are on hand for quick healthy snacks and meals. Parents and children should also be encouraged to learn about and seek out the healthiest options at fast food outlets.

Energy density and nutrient density

Energy density refers the number of calories in a given amount of food. Energy dense foods have more calories per unit volume and often provide few nutrients. Nutrient density refers to the ratio of nutrients to the number of calories in a food; in other words, nutrient-dense foods contain more nutrients per bite than nutrient-poor foods.

Reducing the energy density of food decreases children's energy intake. For example, when children were offered a lower fat version of macaroni and cheese, they consumed the same weight of the food as when they were offered the higher fat version, resulting in significantly less energy consumption (Leahy, Birch, & Rolls, 2008). Another way to reduce the energy density of a dish is to add vegetables. This too, resulted in lower energy intake during a test meal, with the added benefit of an increase in vegetable intake (Leahy, Birch, Fisher, & Rolls, 2008). Longitudinal studies have also found a positive association between the energy density of children's diets and future body fatness (Johnson, Mander, Jones, Emmett, & Jebb, 2008; McCaffrey, et al., 2008).

If parents are concerned about their children overeating, they should realize that energy density is another factor they can control during meal preparation. Knowing and discouraging foods with high energy density and promoting those with high nutrient density are positive steps for

parents to take. However, it is important to remember that just as with sweets, high fat foods are occasionally acceptable to consume.

Eating practices and behaviors that do not work to prevent or reduce childhood obesity

Recent research has shown that many practices parents employ in an attempt to assist their children in developing healthy eating practices are not successful. Some are even detrimental. These practices include pressuring children to eat, using food rewards, restricting foods, being overly permissive, and modeling unhealthy food practices.

Pressure to eat

Parental pressure to eat, an authoritarian feeding practice, may result in a disruption to children's self-regulation of food intake, lower dietary quality, and heavier weight. As mentioned earlier, when parents encourage kids to 'join the clean plate club' (i.e., eat everything on their plate), they are unintentionally teaching kids to pay more attention to external cues (e.g., food on plate or verbal instructions) than internal ones (e.g., hunger and fullness) (Birch, McPhee, Shoba, Steinberg, & Krehbiel, 1987).

Similarly, youth whose parents pressure or prompt them to eat end up eating fewer fruits and vegetables overall and eat more sweets than those whose parents do not pressure them to eat (e.g., Vereecken, Legiest, de Bourdeaudhuij, & Maes, 2009).

There is also some evidence to suggest that those whose parents pressure them to eat are more likely to be or become overweight (Birch & Fisher, 1998; Klesges, et al., 1983). This suggests that parental pressure to eat is not a helpful strategy in terms of teaching self-regulation of energy intake, good dietary choices, or healthy weight maintenance.

Use of food rewards

Likewise, another authoritarian feeding practice, using food rewards to encourage children to eat healthy foods (for example, requiring that vegetables be eaten before dessert) leads to the development of dislike for the healthy foods and increases the importance of and preference for the reward foods (in this case, dessert) (See review: Ventura & Birch, 2008). Rewarding with food leads to an increase in the consumption of unhealthy foods by children (Kroller & Warschburger, 2009) and a decrease in consumption of fruits and vegetables (Kroller & Warschburger, 2008). Like pressure to eat, use of food rewards is not recommended, as it seems detrimental to children's self-regulation in making healthy food choices.

Permissiveness

Although too much parent pressure to eat or restriction of certain foods can lead to overeating and overweight, so too can being excessively permissive about what kids can eat. Parents who use a permissive feeding style may provide few restrictions and let their children choose what and when to eat. Kids whose parents employ this feeding style eat fewer fruits and vegetables and more sweets and consume more soft drinks (Hoerr, et al., 2009; Mendoza, Drewnowski, Cheadle, Christakis, 2006; Vereecken, et. al., 2009). A permissive feeding style is also associated with a higher risk of child overweight (e.g., Hennessy, Hughes, Goldberg, Hyatt, & Economos, 2010). Parents must therefore learn an appropriate balance between being too restrictive and too permissive.

Restriction

Another tactic that seems to make intuitive sense to many parents is restricting access to unhealthy foods. Unfortunately, studies have shown that kids then may pay attention to and eat more of the unhealthy foods when they are available, even if they are not hungry (See review: Anzman, Rollins, & Birch, 2010). For example, greater control by parents over their children's eating has been linked to greater fat intake by the children (Zive, et al., 1998).

Greater parental food restriction has also been linked to overeating, weight gain, a greater tendency to eat in the absence of hunger, and lower ability to self-regulate energy intake, (See reviews: Anzman et al., 2010; Kral & Rauh, 2010; Ventura & Birch, 2008). It has generally been found that parents whose children are overweight or who are concerned about their children being overweight are more likely to use food restriction (e. g., Gregory, et al., 2010; Santos, et al., 2009). Indeed, in a dinnertime meal observation study parents of overweight children used restriction twice as often as parents of children who were not overweight (Moens, Braet, & Soetens, 2007).

Whether restriction *causes* overweight is unclear. For instance, there is some evidence that parents use controlling (authoritarian) feeding practices after, not before, their children become overweight (Rhee, et al., 2009). Conversely, other evidence shows that parents who are concerned about their children becoming overweight, but who are not currently overweight, are more likely to use restrictive feeding practices (May, et al., 2007).

Again, parents must find a balance between being too permissive and too restrictive. Some parents, for example, provide a single serving of dessert with the dinner meal. This may communicate to children that desserts are less important than the meal itself; they are just part of the meal, like the vegetables or beans or meat. Other parents find that serving their children's favorite indulgence foods once or twice per week teaches children that, while they do not have these foods all the time, they will get them on a regular basis; this is also an acceptable practice.

Parental eating behavior

It makes sense that parents' eating behaviors would affect what kids eat. Parent modeling, in fact, has been related to higher intake of healthy foods and lower intake of unhealthy foods (Kroller & Warschburger, 2009). Studies have found parent-child correlations with respect to the consumption amount or consumption frequency of milk (Fisher, Mitchell, Smiciklas-Wright, Mannino, & Birch, 2004), sweetened beverages, (Fisher, et al., 2004; McClain, et al., 2009), fat (Wang, Beydoun, Li, Liu, & Moreno, 2011), fiber (Vagstrand, 2010), and fruits and vegetables (See reviews: Coulthard & Blissett, 2009; Geller & Dzewaltowski, 2009; Pearson, et al., 2009). One longitudinal study found that mothers' weekly consumption of fruits and vegetables was a positive predictor of their children's weekly consumption of fruit and vegetable intake four years later (Vereecken, Haerens, de Bourdeaudhuij, & Maes, 2010).

Research has also shown positive correlations between parents' emotional eating and adolescents' emotional eating (Lauzon-Guillain, et al., 2009; Snoek, Engels, Janssens, & van Strien, 2007), as well as between parents' emotional eating and preschoolers' eating in the absence of hunger (Blisset, Haycraft, & Farrow, 2010). Children's external eating tendencies, or eating in response to external food cues like the sight and smell of foods, are also related to those of their parents (Elfhag, Tynelius, & Rasmussen, 2010; Zocca, et al., 2010).

Although children may resemble their parents in terms of external eating tendencies, they can be taught to recognize and eat in response to internal hunger cues. For example, a six-week intervention study was successful in teaching preschoolers to recognize internal hunger cues, after which they were better able to self-regulate their food intake during a laboratory test meal (Johnson, 2000). Parents can present concrete, developmentally appropriate definitions to their children for hunger and fullness that can be linked to their children's own internal feelings of hunger and satiety. Children can then be encouraged to attend to cues of hunger and fullness before, during, and after meals and snacks.

Parents may not realize how much their own eating habits influence the eating habits of their children and may not be fully aware of their own eating behavior. Therefore parents should be encouraged to monitor their own eating and to model healthful eating as much as possible. Such modeling might include moderation in eating sweets and high fat foods and reduction in emotional eating and eating solely in response to external food cues. Learning self-monitoring and self-regulation, of course, requires effort and practice.

In summary, in order to provide a healthy eating environment, parents might be encouraged to adopt characteristics of authoritative parents or an authoritative feeding style – being both firm with expectations and responsive. In other words, parents can be assertive, but can also negotiate, compromise, and explain expectations to their children rather than simply demanding compliance. For example, one study found that negotiation with children on food choices and rules increased the likelihood of daily consumption of vegetables (Vereecken, et al., 2009).

Physical activity, sedentary activity, and sleep behaviors that influence childhood obesity

Parents not only influence the food environment of their children, but also the activity and sleep-related aspects of their children's environment. They can model, support, and encourage physical activity, help to reduce time spent in sedentary activities, and encourage appropriate amounts of sleep for their children. Each of these can reduce or prevent childhood obesity.

Physical activity

Not surprisingly, kids' activity levels (from preschool age to adolescence) are positively correlated with their parents' activity levels (See review: Edwardson & Gorely, 2010). One study found that girls who reported their parents exercised at least three times per week were about 50% more active than girls with sedentary parents (Madsen, McCulloch, & Crawford, 2009).

Along with modeling, parental encouragement and logistical support are positively correlated with children's amount of physical activity (See reviews: Edwardson & Gorely, 2010; Beets, Cardinal, & Alderman, 2010). Although adolescent girls' physical activity levels tend to decrease during the middle school and high school years, longitudinal studies have found that family support may mediate this trend (Davison & Jago, 2009; Dowda, Dishman, Pfeiffer, & Pate, 2007). Family support was either defined simply as 'logistical support' (Davison & Jago, 2009) or as the weekly frequency with which other family members encouraged, participated in, provided transportation for, or watched the child's physical activity, or told the child that physical activity was good for him or her (Dowda, et al., 2007).

One study found that parents who talked to their adolescents or attended activities with them (not necessarily sports or exercise-related) had children who participated in more physical activity, (Ornelas, Perreira, & Ayala, 2007); so even generally communicating and engaging

with adolescents appears to be related to their increasing activity level. The amount of time spent outdoors is also highly related to the amount of kids' physical activity (Cleland, et al., 2008; Nilsson, et al., 2009; See review: Sallis, Prochaska, & Taylor, 2000). Parents have a role in influencing the amount of time their children spend outside; they can offer support for and encourage outdoor activities. The home environment can also be conducive to physical activity. One longitudinal study found that, for 10-12 year olds, a higher number of physical activity equipment items at home was related to decreases in BMI z-scores three years later (Timperio et al, 2008).

Parents have many ways to influence their children's physical activity. They can pay or request scholarships for sports fees, provide or arrange transportation to sports practices or other places where their children can be active, regularly make time to be active as a family, and make an effort to get an adequate amount of exercise themselves. They can also work to make their homes and schools conducive to physical activity and encourage their children to spend more time outdoors.

Television and sedentary activity

A large number of cross-sectional and prospective studies have noted a relationship between heavy television viewing and childhood overweight (See reviews: Jordan & Robinson, 2008; Rey-Lopez, Vicente-Rodriguez, Biosca, & Moreno, 2008). For example, one study found that for each additional hour of television viewed per day, a child was three times more likely to be obese (Gable & Lutz, 2000). In randomized controlled trials, reducing the number of hours spent viewing television and other screen media has been related to a decrease in BMI and overweight, as well as weight loss among overweight children (Jordan & Robinson, 2008).

Parents are not only models of physical activity, but also of inactivity. The more parents watch television, engage in other leisure time screen-related sedentary activities, or simply spend time being inactive, the higher the risk is that their children will too (e.g., He, Harris, Piche, & Beynon, 2009; Jago, Fox, Page, Brockman, & Thompson, 2010).

Studies have shown that hours of television watched are positively associated with increased intake of nutrient-poor, energy-dense foods, and greater overall energy intake (See review: Shea, Harvey-Berino, & Johnson, 2010). Furthermore, two intervention studies found that when children and adolescents decrease the amount of time they spend in sedentary activities, their fat intake and total energy intake decrease as well (Epstein, Roemmich, Paluch, & Raynor, 2005; Epstein, et al., 2008).

A larger number of sedentary items at home (for example, televisions, DVD players, computers, electronic games) has also been positively associated with children's BMI (Crawford, et al., 2010) and is predictive of greater increases in BMI z-scores over three years (Timperio et al, 2008).

An expert panel recommends eliminating televisions from children's bedrooms, turning off the television while eating, and budgeting television time (Jordan & Robinson, 2008). While completely eliminating a television from the bedroom may not be practical, parents and children can work together on viable solutions that promote healthier viewing habits.

Sleep

The relationship between diet quality and sleep duration has also been studied. In general, it has been found that 'short' sleepers consumed a higher proportion of calories from fat (Weiss,

et al., 2010) and more energy rich foods, such as fast food, sweets, and soft drinks (Hitze, et al., 2009; Westerlund, Ray, & Roos, 2009).

The relationship between sleep and overweight has received attention in the last few years. Two 2008 reviews of cross-sectional studies found that shorter sleep duration is associated with greater overweight in children and adolescents (Marshall, Glozier, & Grunstein, 2008; Patel & Hu, 2008). More recent studies have also found this to be true (e.g., Shi, et al., 2010). For example, one cross-sectional study of 5-15 year olds found that the risk of children being obese was doubled for those who slept less than nine hours per night compared with those who slept 10 or more hours each night (Shi, et al., 2010).

Longitudinal studies have resulted in similar findings to these cross-sectional studies. Toddlers and children who slept fewer hours were more likely to be overweight three to six years later (Bell & Zimmerman, 2010; Lumeng, et al., 2007; Marshall et al., 2008) and adolescents whose sleep duration decreased during puberty were more likely to experience an increase in BMI during that same period (Rutters, Gerver, Nieuwenhuizen, Verhoef, & Westerterp-Plantenga, 2010). Another notable study found that short sleep duration in childhood predicted obesity at age 32 (Landhuis, Poulton, Welch, & Hancox, 2008).

It seems prudent to recommend that parents encourage their children to get enough sleep, for example by ensuring a regular bedtime routine, removing televisions from children's bedrooms, and making sure bedrooms are quiet, dark, relaxing, and a comfortable temperature. Having children complete homework early and reducing sources of worry or stress may also lead to better and longer periods of sleep.

Implications and Conclusions

Research has clearly demonstrated that there are dietary and physical activity behaviors that families can adopt to encourage healthfulness and which can reduce or prevent childhood overweight. Regarding food-related behaviors, parents are encouraged to provide access to nutrient-dense foods and beverages for meals and snacks, reduce access to high-calorie, nutrient-poor beverages and foods at home and at restaurants, and avoid excessive food restriction or use of food rewards, as well as modeling healthful eating. In the activity realm, parents can provide opportunities and encouragement for children to be physically active, reduce children's television and video game time, and model healthy physical activity practices to reinforce these patterns in youth.

Professionals working with families can support parents in these efforts.

- At youth gatherings, such as 4-H meetings, provide healthy refreshments. Examine what types of foods are being sold by the youth groups for school fundraisers or at fairs and other events. Strategize with others about how to change sales so that foods are more nutritious.
- Offer parents handouts with tips to help their children develop healthy eating practices based on the research presented in this article. Develop a recipe sharing venue for parents where they can exchange ideas for nutritious and appealing meals and snacks.
- Build in physical activity to youth meetings and events. Assign a youth member to lead a short physical activity at meetings. Brainstorm with youth and their parents for ideas of how they can be active for one hour a day. Ideas may include walking the dog together each evening or walking out to feed livestock rather than riding in a vehicle.

- Be a community advocate and resource for offering better school lunches and limiting access to school vending machines with unhealthy food choices. Advocate for healthy concession stand options at school and community events.

Parents and professionals working together with youth can strive to offer more nutritious meals and snacks, increase physical activity, and model healthy living. Working together to change the culture of nutrition and physical activity can reduce or prevent obesity in youth.

Note: A comprehensive list of related articles is available upon request. Contact Galen Eldridge, Department of Health and Human Development, Montana State University, galen.eldridge@montana.edu

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Journal of Youth Development
Bridging Research & Practice

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602FA002**

Investigating the Utilization of Research Evidence in the 4-H Youth Development Program

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Abstract: This study investigated the acquisition, interpretation, and utilization of research evidence in the 4-H Youth Development Program from the frame of Social Cognitive Theory. Utilizing Consensual Qualitative Research, we interviewed twenty 4-H faculty, staff, and volunteers from seven states. Results indicated four domains, which covered participants' definitions of research utilization, their experiences utilizing research, the process of acquiring and distributing research, and barriers and facilitators to research utilization. Participants described research use primarily in terms of improving 4-H programs. They discussed their level of confidence (i.e. self-efficacy) in finding and applying research evidence and their beliefs about the outcomes of research utilization (i.e. outcomes expectancy). Participants mentioned such barriers as not knowing where to look for research, lack of time, lack of funding, and difficulty applying research findings to their work. The facilitators included support from other 4-H colleagues and availability of 4-H specific conferences, publications, and curriculum databases.

Introduction

With a growing focus on the evidence-based practices, it is becoming increasingly important for organizations to successfully utilize research evidence and adopt research-based approaches. This is also true for the 4-H Youth Development Organization. As a result, we designed and executed a qualitative research study interviewing 4-H faculty, staff, and volunteers regarding their impressions of the utilization of research evidence in the 4-H program. In this introduction, we review recent dialogue on the gaps in the production and utilization of research, describe the relevance of 4-H to this discussion, and summarize findings related to utilization of research evidence.

The importance of studying the utilization of research evidence

At the present time, the linkages between the production, dissemination, and utilization of research evidence are not well understood. Not only are there significant disruptions in the path from research production to utilization but pertinent research findings are often not integrated into policy and practice (e.g., Tsveng et al., 2008). On the production side, researchers (and their funders) are frustrated that sound research is not used. On the utilization side, policymakers and practitioners are frustrated that published research is not relevant, does not translate well, is not accessible, or is difficult to understand.

In a review of issues in children's mental health, Hoagwood, Burns, and Weisz (2002) termed this the *science-to-service* problem. Preliminary findings from large scale, multi-organization investigations into the phenomena have continued to identify *gaps* between researchers, practitioners, and policy makers (Tsveng, 2010). That is, millions of dollars are invested in research programs; higher stakes and incentives are attached to practitioners who utilize research evidence; and, yet, there is little direction available to policy makers for creating conditions that allow connections to be made.

Interest in the science-to-service issue is strong and includes a variety of stakeholders including government agencies, funders, research intermediaries, research producers, and user communities (Davies & Nutley, 2008).Their interests are related to accountability, cost/benefit analysis, establishing priorities, and improving outcomes. Knowing how and when research is utilized is important because such knowledge can

a) improve the relevance of research,
b) improve its use in policy and practice,
c) improve the interactions between researchers, policymakers, and practitioners, and
d) establish funding priorities (Tsveng, 2010).

The relevance of 4-H to the *research evidence utilization* question

If an organization exists that is perfectly positioned to acquire, interpret, and utilize research evidence, it is the 4-H Youth Development Program. With chartering power originating from the United States Department of Agriculture (USDA), 4-H is housed within the 106 land-grant universities across the 50 states and administered through the Cooperative State Research, Education, and Extension Service. The organization chart for 4-H is complex: partnerships exist with county, state, and federal governments, as well as the private sector. Because the state and county elements of 4-H are physically located and infrastructurally connected to the source of research-producing and disseminating entities (i.e., universities), we believe that 4-H is the ideal organization for a comprehensive case study designed to understand the elements that promote and prevent the utilization of research evidence among its faculty, staff, and volunteers.

Considerations in designing our study

As we contemplated the design for our research endeavor, we simultaneously considered findings from the published literature, recommendations for research design, and the application of relevant theory.

The published literature regarding the utilization of research evidence frequently includes health care professionals and graduate students. Many of these studies have limited the scope of the investigation to individual attributes such as age, education, experience, understanding of

statistics, and knowledge of and experience with research. Critics (e.g.; Estabrooks, Squires, Cummings, Birdsell, & Norton, 2009) consider this to be a weakness and have called for studies that include additional variables such as organization and context (Davies & Nutley, 2008; Estabrooks et al., 2008).

Investigations that included a contextual component have suggested several barriers to utilization such as lack of time, autonomy, money, staff, access to research resources, and organizational commitment to research utilization (Barwick et al., 2008; Brown, Wickline, Ecoff, & Glaser, 2008). In contrast, the presence of learning opportunities, culture building, and availability and simplicity of resources were important facilitators (Brown, Wickline, Ecoff, & Glaser, 2008). In the Barwick et al. study, participants reported that desired resources included support for conferences, access to journals, and other professionals.

Given the contribution of individual and contextual variables to the prediction of research utilization, it made sense to us to employ Social Cognitive Theory (SCT; Bandura, 1986) as a guiding frame. SCT is an approach that is explicitly concerned with the interplay of *social* (e.g., organizational context) and *cognitive* factors in human functioning. There have been few attempts to examine research utilization and interest through the SCT lens.

Bonetti and colleagues (2010) explored the use of evidence-based practice among general dental practitioners by applying a number of psychological theories. They found that SCT explained 29% of the variance in a behavioral simulation exercise and 16% of variance in statements of behavioral intentions. Relatedly, Bishop and Bieschke (1998) used an SCT frame to successfully model counseling psychology doctoral students' interest in research with variable sets representing research self-efficacy, research outcome expectations, environmental influences, and person inputs.

Davies and Nutley (2008) have criticized previous studies of research utilization, indicating that they have often been uncritical and relied on surveys and self-reports. They called for, "more sophisticated examinations of knowledge engagement and knowledge interaction practices" (p. 6). Davies and Nutley elaborated on this point, suggesting that individuals may not be aware that they are utilizing research and calling for research that answers questions such as, "How can we track research use through unexpected avenues of diffusion?" and "What does research use look like at the individual, organization, and system levels?" (p. 7).

Davies and Nutley (2008) distinguished between tracking forward and tracking backward approaches to investigating the utilization of research evidence. Approaches that use the tracking forward orientation examine how research findings make their way into practice and impact the individuals/communities they serve. In contrast, tracking backward approaches begin with practice behaviors to identify research-based influences. In this approach, the investigator attempts to disaggregate multivaried influences to discern the effect of research evidence.

Purpose

Consequently, as we designed our study,

a) we committed ourselves to the SCT lens,
b) we selected a qualitative strategy so that we could capture multiple perspectives, and
c) with the goal of identifying multiple influences, we assumed a tracking backward strategy.

Qualitative research methods are useful in the early stages of a research project, as they can provide vivid descriptions of the phenomenon (Hill, Thompson, & Williams, 1997). Specifically, we used Consensual Qualitative Research (CQR; Hill et al., 1997) method because it offers a systematic and rigorous framework. In our proposal, the SCT constructs of research utilization self-efficacy, research outcome expectations, and contextual supports and barriers guided the creation of questions used to interview stakeholders (i.e. faculty, staff, and volunteers). Given the constructivist-interpretivist paradigm of qualitative research, we remained open to participant influences. That is, we encouraged participants to tell their story even if it fell outside of our SCT framework

Method

Participants

The CQR approach, as outlined by Hill and colleagues (1997, 2005), recommends a sample size between 8 and 15 and suggests that when data are collected from different sources there is the potential for a deeper and richer description of a phenomenon. Our sample included 20 participants: 4 were 4-H faculty (1 male, 3 females), 10 were staff (all female), and 6 were volunteers (all female). At the time of the interviews, participants ranged in age from 38 to 68 (M = 52.5, SD = 7.71) and previous involvement as a 4-H volunteer or a 4-H youth varied across participants (M = 10 years, SD = 11.6 and M = 6.5 years, SD = 7.2, respectively). Participants came from seven states (i.e. AZ, GA, IL, MN, MO, OH, WA) and Washington D.C. In terms of ethnic or national background, 18 self-identified as Caucasian/White, 1 as Latino, and 1 as multi-ethnic.

Researchers

The first author was the principal investigator in this study; she designed the basic parameters of the study and initiated contact with our primary sources of recruitment. The first author has been with 4-H for 11 years in a role as a 4-Her and 10 years as a volunteer. The second author was the graduate assistant of the primary investigator and was involved in the study from its inception, assisting with data collection. To control for investigators' biases, the first two authors did not participate in the data analysis. The remaining investigators were doctoral students in industrial/organizational psychology programs enrolled in a class on qualitative research methods.

Interview questions

With the theoretical perspective of SCT in mind, the first two authors developed a list of start questions. The questions focused on several broad topics: participants' understanding of research within the organization, their familiarity in using and applying research evidence, how they access this evidence, and any barriers surrounding research access and use. Although scripted, the interviews were conducted in a softly-structured way such that the co-investigators were encouraged to follow the interviewee's lead in order to obtain a richer, thicker description of the participants' experience in using research.

Procedure

Recruitment

Participants were recruited through purposive sampling and snowballing techniques. The principal investigator made initial contact within the 4-H organization to begin the snowballing process. We emailed each person the information about our study as well as a copy of our consent form. Upon receiving completed informed consent forms, we scheduled interviews.

Data collection

In order to maximize the number of participants involved in our study and allow for the participation of non-local parties, the interview protocol was conducted in the manner that was most convenient to the participant. The two interview methods were face- to-face and telephone interviews. For both interview methods, dialogue was transcribed as it occurred. Two co-investigators were present during all the telephone interviews with one person asking the questions and fully engaging with the participant while the other person simultaneously transcribed the interview.

Data analysis

Researchers used the Consensual Qualitative Research (CQR; Hill et al., 1997, 2005) method to analyze the data. The CQR method specifies a series of procedures for coding data. First, the research team divided the responses from interviews into units that consisted of one complete thought. A unit could be as small as a single phrase or as long as a paragraph.

Second, looking at the units of data, team members suggested *domains* (or major themes) to which each unit would belong. After the teams determined that the domain list was sufficiently informative and inclusive, each team member independently read through individual interview transcripts and assigned each block of data to a domain. Any disagreements or inconsistencies that emerged during this process were resolved through *consensus* (hence the name of the research method) and, when necessary, the domain list was revised.

Third, after the teams had a stable list of domains, they summarized the content of each domain into *core ideas* (subthemes of a domain). In a manner similar to the development of the domains, the team members developed the core ideas independently, and then discussed these ideas until consensus was achieved. Following an audit (described below), the domains and core ideas were summarized into a CQR frequency table.

Trustworthiness

The trustworthiness of the project was supported in three ways. First, at the beginning of the study and each week thereafter, the researchers recorded and discussed biases and expectations that might influence the analysis (Hill et al., 1997). Our reflexive journal was maintained through an on-line discussion board, allowing for a dynamic exchange about the issues and ideas that emerged during the study.

Second, we presented our preliminary findings to a stakeholder group. Our stakeholders were selected for their knowledge about and investment in research utilization within 4-H. Following the presentation, we dialogued with our stakeholders about potential inaccuracies and future research possibilities.

Finally, we audited our domains and categories to determine that (a) the material was assigned to the correct domain, (b) the core ideas represented the content of the domain accurately, and (c) the wording of both the domains and the core ideas reflected the raw data well. The teams used the comments from both stages to revise domains and core ideas.

Results

The data collected from the participants represented various aspects of how research is used, understood, and valued in 4-H by volunteers, staff, and faculty nationwide. Examination of the data led to the identification of four domains: research value/definition, research utilization, research acquisition/distribution, and barriers/facilitators to research use. Readers are

encouraged to read the narrative results in tandem with the CQR Frequency Table (Table 1). This simultaneously serves as an outline and an index of the salience of each theme.

Table 1

Summary of Domains, Core Ideas, and Frequencies

Domain	***Core Idea***	***Frequency***	***Participants***	***Units***
Research Value/ Definition	Definitions of research and research utilization vary widely	Typical	13	40
	4-H is unique because of its commitment to research	Typical	12	32
	Research is useful for improving 4-H programs	Typical	11	26
	Perceived importance of research increases at each level (club, county, state, national) of the organization's structure	Typical	13	34
	Perceived importance of research differs across roles in the 4-H organization	Typical	11	23
	Research value differs across the local organizational culture, individual differences, and time	Typical	10	20
	Personal benefits received from utilizing research evidence	Variant	9	15
	Preferences for non-research-based approaches	Variant	5	5
Research Utilization	Development of training, workshops, and program materials	Typical	14	33
	Individual differences in comfort with research utilization	Typical	10	15
	Evaluation data is important to stakeholders	Variant	8	26
	Need to translate research into simpler, more practical language	Variant	7	16
	Situational factors influence research use	Variant	7	7
	Integrating experiences and non-research based knowledge	Variant	6	9
Acquisition/ Distribution	Informal sharing of information with others	General	15	84
	Searching the internet	Typical	12	27
	Reading journals	Typical	11	17
	4-H curriculum and resources	Typical	10	17
	Conducting literature reviews	Typical	10	15
	Attending workshops/training	Typical	10	14
	Participating in conferences	Variant	8	15
	Utilizing multiple sources	Rare	4	5
	Conducting internal research	Rare	3	5
Barriers/ Facilitators	Lack of time	Typical	13	28
	Lack research skills	Typical	13	25
	Difficulty accessing research	Variant	9	13
	Insufficient funding	Variant	6	11
	Organizational barriers	Variant	9	15
	Individual resistance	Variant	6	9
	Insufficient research sharing	Rare	4	4
	Difficulty in applying research evidence	Rare	4	4

Note. $N = 20$. General = applicable to at least 75% ($n \geq 15$) of the participants; Typical = applicable to at least 50% ($n \geq 10$); Variant = applicable to at least 25% ($n \geq 5$); Rare = applicable to < 25% of the participants. Categories with one case were dropped.

The table is organized by domains. Within each domain are the core ideas, organized in order of frequency-of-response. The Frequency column provides the narrative description: "general" means that the core idea is applicable to at least 75% of the participants; "typical" means that it is applicable to at least 50% (but less than 75%) of the participants; "variant" means that it was applicable at least 25% (but less than 50%) of the participants; and "rare" means that it was applicable to less than 25% of the cases. The Participants column provides the number of participants who mentioned the core idea. Finally, the Units column indicates the number of times the core idea has been mentioned throughout all of the interviews (without reference to the number of participants). These last two columns allow us to have some sense of how predominant a topic was for the participants.

For example, the category, 4-H is unique because of its commitment to research (located in the domain *Research Value/Definition*) is classified with the frequency of "typical." It was expressed by 12 participants (60%) and was identified in 32 interview units. That means that each of the participants mentioned this theme roughly three times. In contrast, the category, *Preferences for non-research based approaches* (located in the domain *Research Value/Definition*) is classified as "variant." It was expressed by five participants five times, meaning that each participant mentioned the theme once.

Quotations from the stakeholders are presented throughout the results. At times, these quotes have been amended to improve the readability of the manuscript. All changes have been made with care so that the quotes would still reflect the intent of the speaker.

Research value/definition

The *definitions of research and research utilization varied widely*. At one end of the continuum, a participant stated, "doing research gives you information." At the other end, a participant defined research as "based in logical positivism. There is one truth significantly regressed and disciplined within research. We're rigorous, reliable, etc. We deal with rejecting the null hypothesis." Many acknowledged "broadness" and "variability" in the definitions of research.

Generally, participants expressed the notion that *4-H is unique because of its commitment to research*. That is, using and conducting research is a distinguishing characteristic of this youth program and increases its value. For example, one participant contemplated, "We need to be challenging ourselves. What is that research base and what is it telling us? It is the fact that our program is built on positive youth development research that distinguishes us." Another participant highlighted the uniqueness of 4-H, "The research is what makes us unique to other groups."

Many identified *research as useful for improving the 4-H programs*. Several described the importance of looking to research in developing programs and activities. Specific examples included using research to guide volunteer recruitment/selection, incorporating experiential learning, selecting age-appropriate activities, and developing curriculum. Others mentioned the importance of conducting program evaluation and using the results to determine program effectiveness and guide program improvement. "On the program evaluation end we ask, 'How does the program work?' 'Is it successful?' We have to do that program evaluation."

Participants attributed variation in the *perceived importance of research* to factors that clustered across three core ideas. Commonly, participants *perceived that the importance of research increased at each level of the organization's structure*. For example, a club-level

volunteer stated, "I don't know that I see research as terribly important when I directly interact with the kids." In contrast, a faculty member stated, "the higher up you go in administration, the more important research utilization becomes. You become more responsible for ensuring that the staff seek out and apply research. At my level, I feel very responsible for getting research into programs." This perspective was repeated many times.

A second core idea related to the *perceived importance of research* suggested that it *differs across roles in the 4-H organization.* Central to this core idea were references to job descriptions and role definitions. Within this core idea, faculty participants frequently referenced "scholarship" requirements for promotion and tenure. Staff and volunteers were less likely to contribute to this category.

A third core idea related to the *perceived importance of research* indicated *differences as a function of local organizational culture, individual differences, and time*. As an example of organizational culture, several referenced differences in geographic regions. One stated it this way: "It is the environment we have and the expectations we have in our program. Things like that would make using research vary from state to state. The philosophy of their state's organization will impact how they look at the research." Regarding individual differences, several referenced the education level of volunteers, interest in the topic they are leading, and individual comfort with research. Some referenced changes as a function of time and funding sources. One stated it this way, "We went from a phase in the 70s where the research piece was emphasized, then it fell, now it's coming back. It seems to come with economy waves."

In addition to organizational reasons for valuing research, several participants reported *personal benefits from utilizing research evidence*. For example, one participant mentioned, "Research helps me personally; I enjoy doing it and am personally comfortable doing it. I find it engaging and fun." A volunteer shared, "I've gotten a lot of free education as far as I'm concerned. Plus, it gives you a lot of self-worth too."

Although it was a variant response, there was acknowledgement of those with *preferences for non-research based approaches.* One participant described this phenomenon: "I also run into people who say that they know what works with 4-H and our kids, and that we should not bother them with research. They tell us to stay away from their program, that they don't need us in here, they know what works." We add a note of interpretive caution to this category: no participant in this study endorsed this viewpoint. In all units in this core idea, the participants were referencing viewpoints of "others."

Research utilization

All participants talked about what *research utilization* means to them, how they use research and research evidence in their work, and how research is used in the organization. More than half of the participants discussed how r*esearch is used to develop training, workshops, and program materials*, providing numerous specific examples. Within this category there appeared to be several clusters of research utilization including project-specific program development (e.g., foods, animals, plant sciences), volunteer training, leadership development, and more general applications in working with youth.

Individual differences in comfort with research utilization were reported. Those who reported feeling efficacious in this area often qualified their statements. One added, "after years of experience," and another was comfortable, "in my own little small area."

Almost half of the participants reported that *evaluation data is important to stakeholders.* The range of stakeholders was broad. A staff member stated, "If I have information on how to best engage a certain age group, I can pass that on to the volunteers, and they can program accordingly." Research also helps to obtain funding, "Some donors want to know if an experimental or a quasi-experimental evaluation was conducted by an external group. They will not give you any money until you can give that amount of rigor." Others referenced annual evaluations where the effectiveness of program data was assembled, reported, and evaluated. The results impacted program continuation, program improvement, and leveraging of funds from public and private investors.

Some of the participants described a *need to translate research findings into simpler, more practical language*. For example, one participant's job involved "taking research results and conclusions and trying to turn them into practical ideas that people can use." Another participant reflected, "It's an important factor in research—presenting information in the practical, common use, so that the people using it can understand it. Otherwise, you're reading something that doesn't make sense."

Almost half of the participants mentioned that *situational factors influenced research use*. Examples included job requirements, personal interest, and so forth. One volunteer explained that her application of research was dependent upon the youth, "Not all research is applicable to all situations; every kid is an individual. If something isn't working, then let's do something else."

A number of participants provided accounts of how they *integrate experiences and non-research based knowledge* to do their job. One participant put it this way, "It's a balance between what research says and pulling back to some of our traditions. For example, we still do the camp because we believe in our heart that it works. Now we have to do the research to prove what is in our hearts is true." Another stated, "I believe that dialogue, reading, and discussing how research is used with the youth helps, because then you can say that it worked in that county, and it may work in mine."

Research acquisition/distribution

Throughout the interviews, all of the participants discussed how individuals acquired and distributed research in the organization. The most common approach to acquiring and distributing information was the *informal sharing of information with others* – word of mouth. One of the 4-H staff representatives said, "I think [volunteers] learn informally. I have not seen them in many classes, but I have seen them in my office a lot. They get it through networking and discussing. There is a lot of informal dialogue about what might work." Similarly, according to one of the volunteers, connecting with others is "very important. It's a network; everybody is helping each other."

Searching the internet and *reading journals* to acquire information were also important. Both of these require some effort. One stated, "I do Google a lot, and it is figuring out the right word combinations to use." Another participant mentioned that there are journals available to staff and volunteers, "We have some journals that we can subscribe to and read, and also we can find research in other journals."

Half of the participants reported using the *4-H curriculum and resources*. Increasingly, this curriculum is expanding beyond the traditional project books and is accessible through the internet or electronic resources. One participant commented, "The research gets to volunteers

in the form of curriculum developed from professionals based on the research." Similarly, a volunteer pointed out that "a lot of information comes through 4-H project books." Approximately, half of the participants regularly *conducted literature reviews* to find the information that they need. For example, one participant referred to literature when "having a difficult time with something." Another participant was doing "a lot of research, and looking at different articles, and trying to stay up on recent articles."

Half of the participants talked about the importance of *attending workshops and training*. One participant acknowledged, "All of the leadership programs are research based. At any leadership workshop they will talk about the research behind the information." Additionally, almost half of the participants *participated in conferences* both internal and external to 4-H, which permitted them to share and acquire information. One of the participants expressed, "I've been to several conferences and leadership trainings, and they talk more about what research has shown us, this is how we work, it works." Another participant mentioned that research is shared "…at the national meeting. People do presentations, workshops, seminars, poster presentation, research presentations."

Several acknowledged the importance of (and need to) *utilize multiple sources.* Although this core idea is identified as rare in Table 1, this designation is probably misleading. Most of the participants described multiple sources of information and these were singularly categorized in the preceding core ideas. One participant succinctly stated this core idea as, "We get our information from lots of places."

Finally, although it was rare, a few described acquiring information by *conducting internal research*. They described creating/administering surveys and working "through the IRB process and learning to feel comfortable with that."

Barriers/facilitators

In spite of strong organizational commitments to utilizing research, the participants faced obstacles. One of the major barriers to research utilization reported by participants was a *lack of time* to acquire, utilize, and disseminate research. A curious pattern in this core idea was the recognition of lack of time experienced by the stakeholders at the organization level a step lower than the speaker. For example, a state-level faculty member stated, "We encourage county staff to read articles, to go to conferences, but they have a very, very full plate. We all have plenty to do." In parallel, a county level extension educator stated, "There is time challenge when you work with volunteer organization. Getting research out to volunteers in a useful, time respecting way is a challenge."

Lack of research skills was mentioned almost as of often as the lack of time. A strongly and broadly expressed sentiment in this core idea was the need to have state and county faculty members who could translate research into accessible "terminology" with "practical application." One county level faculty member stated this with some passion, "A few years ago, some people sent out articles to people – not one iota of it was useful. I wanted the research summarized, and I wanted to understand its application." Participants talked about the difficulty of employing faculty/staff who conduct and understand research *and* interpret it in a way that the volunteers can easily understand and use. As one echoed, "Not everybody who is a good researcher is a good translator of it into practical application and use. You really have to search for people with some special skills to be able to do the translation. The skill set that it takes is really a challenge." Additional skills that were strongly desired included assistance "integrating" research into programs and activities; assistance with conducting needs assessments and

program evaluations; and training for volunteers who were obtaining information on the internet. Specifically, there were concerns about skills and abilities in evaluating internet-based "research."

Difficulties accessing research presented another common concern. Some sought the "source" of research; others had difficulty discerning what is "true" or credible research (particularly on the internet); and others desired, "a summary." A few individuals described logistical barriers to accessing research such as an inability to access the on-line database at the land grant university. In one instance this was coupled with a "9-hour drive to the library." In describing these obstacles, the participants desired "more accessible research structures," or a designated person. Many participants noted the interaction of this core idea with time. For some, this resulted in a lack of motivation to vigorously pursue potentially relevant research evidence.

In these economically difficult times, it was not surprising that several participants identified *insufficient funding* as another obstacle. One of the participants described, "We are in a tough budget time in terms of education and human service funding. We had significant cuts in staff and program dollars. When that happens and people are in the survival mode, they do not want to think about how to turn research into practice, they think about how to make sure the program survives." Regarding the difficulties in accessing research (the immediately preceding core idea), one participant referenced the "lost funding and the loss of our specialist positions."

Almost half of the participants identified varied *organizational barriers*. Some discussed system and policy issues that impact the utilization of research. One described differences in educational requirements (e.g., bachelors versus masters) in county level faculty positions. Others described differences in professional development programs. Yet, others indicated recent or current organizational restructuring. Not surprisingly, many of these statements were connected to statements about funding.

Almost one third of the participants mentioned that *individual resistance*, particularly resistance to change, hinders research utilization. One of the participants said, "The biggest barrier is 'I've always done it this way, I'm not thinking about changing.' It's easier to do it the way you've always done it."

A few participants mentioned *insufficient research sharing*. Included in this core idea was the desire for more programs to publish their research findings and the desire for a common source of relevant information. One stated the need this way, "We might be trying to do something new, but people may have already done it in the past."

Finally, a few of the participants shared experiences with *difficulties in applying research evidence.* Specifically, participants suggested that the applications of research results were not always clear, or that the suggested application was not always feasible. One stated, "Academic journals generally don't tell you the application. They give you the information, but they don't go into how it applies. There needs to be a layer in there of application. How does it affect the 4-H program?"

Discussion

The results of this study provided useful information for understanding the barriers and facilitators of research utilization throughout the 4-H organization. Our project and findings present a unique contribution in that they broaden the view of the 4-H program to discover how

research is incorporated into the organization. Because our study examined the experiences of faculty, staff, and volunteers, we were able to obtain a multi-angled perspective regarding the utilization of research, the outcomes of research utilization, and the contextual supports of research use at different levels of the organization. In the remainder of our Discussion, we connect our findings back to SCT, review the limitations of the study, and identify next steps.

Outcomes Related to Social Cognitive Theory

Consistent with previous research, (e.g. Brown et al., 2008; Meijers et al., 2006), we found that contextual factors such as access to research and resources and support for conducting and utilizing research affected research utilization. Specifically, participants talked about the barriers such as not knowing where to look for research, not having enough resources, lack of time, and difficulty obtaining the materials if they were not available online; these were similar to barriers previously reported in literature (e.g., Barwick et al., 2008; Brown, Wickline, Ecoff, & Glaser, 2008). Lack of funding was another concern that has been previously reported in research (Barwick et al., 2008). Finally, participants talked about the difficulty of applying research due to a lack of application suggestions in journals. Some of the supports included aspects such as the availability of conferences and 4-H specific publications. Additionally, 4-H colleagues seemed to play an important role by providing interpersonal assistance and needed information. Overall, the supports we identified were similar to those reported by Barwick and colleagues. In general, those participants who knew how and where to access information reported that 4-H provides an abundance of helpful materials.

Our results also supported the notion of a range of research utilization self-efficacy (e.g., beliefs about one's ability to perform specific behaviors or courses of action regarding research utilization (Bandura, 1986). Participants who voiced lower self-efficacy desired training/practice in locating research. In contrast, participants with higher levels of self-efficacy expressed confidence in integrating research evidence into their work.

Regarding research outcomes expectations, which involve beliefs about the outcomes of various courses of action (Lent, Brown, Schmidt, Brenner, & Treistman, 2003), we found that several participants had positive outcome expectations of using research. For instance, some said that research utilization would help build stronger communities. Others said it would provide better quality programs to kids and will improve the volunteer system of the 4-H program.

Limitations

Although the research design of our project is consistent with the standards for CQR (see Hill et al., 1997, 2002), the CQR method has limitations. Because its origins are grounded in a constructivist-interpretivist philosophy of science, generalization of the results is not a goal. The constructivist position holds that there are, "multiple, equally valid, socially constructed versions of 'the truth'" (Hill et al., 2007, p. 197). Consequently, our results are affected by the personalities and interactions of the participants and researchers. Moreover, the voluntary nature of the project likely contributed to a selection bias. For example, our findings are based on the interviews with those who felt comfortable with the term, "research utilization"; the 4-H volunteers (as opposed to faculty and staff) in our project came from only two states; the majority of our participants were female; and all of our participants were recruited by e-mail (suggesting that all had some type of internet access).

Next Steps

We do not believe we are finished. So that we may evaluate research utilization within 4-H more formally, we are planning to use the results of this study to inform the creation of

instruments to measure research utilization self-efficacy, research outcome expectations, contextual supports and barriers, and research evidence utilization. Overall, we hope that by utilizing multiple stages and multiple approaches our project and findings will help broaden our understanding of how research is incorporated into and utilized throughout the organization.

Acknowledgements: We thank all of the 4-H faculty, staff, and volunteers for participating in this project. We offer special thanks to Jana Ferris, 4-H Youth Development Educator, Washington State University Extension and Linda Jo Turner, Foundation Relations, National 4-H Council, for their unlimited support for and encouragement of this project.

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Journal of Youth Development
Bridging Research & Practice

Examining the Reasons and Relationships Between Why Youth Join, Stay in, and Leave 4-H

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602FA003**

Examining the Reasons and Relationships Between Why Youth Join, Stay in, and Leave 4-H

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Abstract: While the Minnesota 4-H Club program has grown over 29% in the last six years, annually over 25% of youth do not re-enroll. The Minnesota 4-H Retention Study asked youth who left the program why they decided to join, stay and ultimately leave 4-H. Data from 220 youth were examined to better understand the reasons for and relationship between youth joining and staying in 4-H and their reasons for leaving 4-H. Youth joined 4-H because they wanted to have fun, try new things, and participate in projects and fairs. Top reasons they stayed in 4-H were they liked being with other kids, had fun, and learned new things. Primary reasons youth left were they lost interest in 4-H or became involved in other activities. Examining the relationships revealed that paying particular attention to youth experiences in project learning and teaching, relationships with adults, and youth having fun will increase retention.

Introduction

While the Minnesota 4-H Club program has been growing rapidly over the last six years, over 25% of youth tracked through the state's individual enrollment database, 4-HPlus, do not re-enroll annually. In order to better understand how 4-H could improve its member retention rate, the Minnesota 4-H Retention Study asked 4-H members who left the program why they decided to join originally, why they stayed in 4-H, and ultimately the reasons they left 4-H.

The research began in 2007 as a cooperative effort between Wisconsin and Minnesota. The initial study was conducted in the summer 2008 with Minnesota youth who were members in 2006-2007 4-H program year but did not re-enroll in 2007. The current article is based on a revised survey and new sample of Minnesota youth who were 4-H members in 2007-2008 but did not re-enroll in 2008.

Research indicates that participation in out-of-school time activities can benefit young people academically, socially, and emotionally (Little, Wimer, & Weiss, 2008). It is important, however,

to not only have youth enter programs but keep them involved at a consistent level for a prolonged period of time. Research shows that youth who participate more frequently and for a longer period of time are more likely to benefit academically, to have beliefs about their abilities or to make future educational or occupational plans (Marsh, & Kleitman, 2002; Posner & Vandell, 1999). Thus retaining youth is a major consideration in improving impact.

Studies of retention in 4-H have been conducted across the country but specifically in West Virginia, Kansas, Louisiana, Indiana, and Colorado. A Kansas survey of first year families showed that a lack of understanding of the overall 4-H Program, not feeling welcomed or a part of the club, and other time commitments were major factors in the decision to drop out of 4-H (Astroth, 1985). Indiana research revealed that the most frequent reason for dropping 4-H was displeasure with the 4-H club (Ritchie, & Resler, 1993). Most studies have focused on reasons for leaving 4-H and do not consider why youth join or stay in the program, let alone examine the relationship between these factors.

A number of studies show a positive relationship between staying in a youth program and adult interaction. When adults are helpful, respectful, and nice to 4-H members, youth continue to participate (Ferrari, T.M., & Turner, C.L., 2006). According to some authors, a positive adult-youth relationship may be the most critical element to a program success (Rhodes, 2004; Shortt, 2002). Other factors to examine about why youth continue to be engaged in youth programs are opportunities for leadership, a sense of personal safety, opportunities for socializing with peers, and engagement in high-quality learning experiences (Weiss, Little, & Bouffard, 2005).

While some things are known about why youth join or stay in programs as well as why they leave, this study seeks to examine the relationship between reasons for joining, staying and leaving within a sample of youth that have participated in 4-H for a year or more. By examining reasons across these areas rather than just within each, it is hoped that new insights with implications for youth programs will emerge.

Methodology

Participants

Young people who were Minnesota 4-H club members in 2007-2008 but did not re-enroll in fall of 2008 were asked to complete an online survey if they had an e-mail address. Virtually all individual youth have an email in the program management system used in Minnesota (4-H Plus) although emails frequently change and many of those used for this study were over a year old. The study sent email invitations to 3,073 youth in grades one to eleven. Of these youth, 68 % spent three or fewer years in 4-H and 32% spent more than four years in the program. Youth who did not respond to the initial email were sent one additional reminder. One hundred-four email replies were received indicating that youth were in fact still 4-H members but had not yet re-enrolled. In the end, 220 youth completed valid surveys. Of the participants, 64% were female and 36% were male (compared to the targeted population of 60% female and 40% male). Based on 4-H enrollment data, the average length of 4-H membership for the responders was 3.3 years compared to 3.1 years for the targeted population.

Data

Each participant was asked to go online to complete a twenty-one item survey that included questions on the following:

- Lists of why youth joined, stayed in, and left 4-H,

- Whether they received information and support from Extension or 4-H club,
- Their perceptions of 4-H club and project meetings,
- What they participated in at club, county and state levels, and
- Their participation in other activities outside of 4-H during their last year and in the year after their 4-H membership.

Questions generally required only a yes/no response. Some questions also offered youth an opportunity to add other reasons through open-ended comments.

Youth invited to complete the survey received a code in the email recruitment letter to allow them to access the survey on line. This approach allowed researchers to both connect responses to existing data on program participation in the program management database and to follow up with non-responders while not asking for names or other identifying information. The survey was identified with and conducted by the University of Minnesota Extension center for Youth development and the Minnesota 4-H program.

Responses were analyzed using SPSS. This article examines both the reasons for joining, staying and leaving 4-H as well as the relationship between these reasons and relationships to grade level and gender using simple Chi-squared tests.

Results

Why Youth Joined 4-H Originally

Youth were presented with seven reasons why they might have joined 4-H and asked to select all of the reasons that applied to them. Most youth indicated they originally joined 4-H because they wanted to have fun (91%), try new things (86%), participate in projects and fairs (80%), their parent/guardian signed them up for 4-H (73%), or liked the idea of doing community service (60%). Less common responses were joining because friends were in 4-H (42%) and wanting to teach others (38%). About 10% of youth added an "other" response with the most common responses about joining to work with animals or because other family members were in the 4-H program.

Girls were more likely than boys to join 4-H to try new things, while boys were more likely to have joined 4-H because parents signed them up. Youth in sixth grade and over were less likely to have joined 4-H because parents signed them up than younger respondents.

Why Youth Stayed in 4-H

Youth were asked to select from a list of nine reasons about why they stayed in 4-H. Some but not all of the reasons paralleled questions about reasons for joining. The following reasons were selected by a majority of youth as a reason why they stayed as long as they did: liked being with other kids (79%), had fun (76%), learned new things (72%), parents wanted them to stay involved (67%). Liked the 4-H club leaders (63%), enjoyed working on projects and participating in fairs and events (61%), community service projects (56%), awards and recognition (55%). Only teaching others was selected by less than half of the youth (40%). Less than 5% of youth wrote in another reason not on the list and these were mostly about specific activities, meeting others, and the fair specifically.

When comparing reasons for staying between grade level groupings, only one significant relationship emerged: sixth through eighth graders were far less likely to have stayed in 4-H because they liked their 4-H club leaders than either youth in fifth grade and under or youth in ninth grade and above. There were no significant differences between boys and girls.

Reasons Youth Left the 4-H Program

Youth were also given a list of thirteen possible reasons for leaving and asked to select all of the reasons why they left 4-H. The primary reasons youth left the 4-H program in 2008 were because they lost interest in 4-H (47%) or became involved in other activities (47%). Secondary reasons included friends were not in 4-H (31%), they did not learn as much as expected (28%), or they did what they wanted to do in 4-H, such as met goals or participated in desired activities (26%). Still fewer youth reported they did not get enough help in 4-H (20%), did not feel welcomed (17%), were prohibited by barriers (14%), were not able to help others (10%), did not get to make choices (10%) or participate in community service (5%). In a few cases the program was no longer offered (5%) or the youth moved (4%). Twenty-nine youth (13%) wrote in other responses, with poor meeting environment and busy schedule being the most common.

When looking at grade differences, only one reason was found to have significant differences: youth in ninth grade and over were less likely than eighth grade and under to leave 4-H because they were not getting enough help. No significant relationship between reasons for leaving and gender was found.

Relationships Between Reasons Youth Stayed and Reasons Youth Leave

In examining 117 possible combinations between the nine reasons for staying and thirteen of the reasons for leaving, twenty-five significant relationships were found (21% of those tested). These are summarized below based on the five main reasons youth stated for staying.

When youth indicated they stayed in 4-H because they had fun, they were less likely than other youth to leave because

- Their friends weren't in 4-H (35% vs. 56%),
- They didn't feel welcomed at club meetings (16% vs. 52%),
- They didn't get enough help (20% vs. 44%), or
- They lost interest in 4-H (56% vs. 77%).

Youth that stayed because they learned new things were significantly less likely than other youth to leave because they

- Did not feel welcomed at club meetings (18% vs. 35%),
- Did not get enough help (20% vs. 42%), or
- Did not get to choose what to do (9% vs. 24%).

If youth stayed in 4-H because they enjoyed working on projects and participating in fairs and events, they were *less likely* to leave than other youth because they

- Lost interest in 4-H (51% vs. 78%)
- Didn't get enough help (19% vs. 37%) or
- Had no choice in what to do (7% vs. 25%).

However, they were *more likely* to leave because they had already done what they wanted to do in 4-H (41% vs. 23%).

When youth stayed in 4-H because they liked teaching others about things they know how to do, they were *less likely* than other youth to leave because they lost interest in 4-H (44% vs. 72%) but *more likely* than others to leave because they

- Were not able to teach others (20% vs. 9%), or

- Already did what they wanted to do (43% vs. 27%).

If 4-H members stayed because they liked their 4-H leader(s), they were less likely to leave because they

- Didn't feel welcomed (13% vs. 46%),
- Didn't learn as much as expected (32% vs. 58%), or
- Didn't get enough help (19% vs. 41%).

These results suggest that there are some logical connections between why youth stay and why the ultimately leave 4-H. More will be said about this in the implications section.

Tables 1 and 2 examine the same results but look for differences between those who chose the different reasons why youth left 4-H. Interestingly, two reasons for leaving had more significant relationship with reasons youth stayed than any of the others. Youth who left 4-H either because they didn't get enough help (Table 1) or lost interest (Table 2) had both similar and some different reasons for staying in 4-H for as long as they did.

As Table 1 shows, youth who left because they did not get enough help were less likely to have reported staying because they had fun, learned new things, liked the club leaders, enjoyed working on projects and participating in fairs, and like awards and recognition. Interestingly, this was the only relationship between staying for awards and recognition and any reason for leaving. Perhaps if one feels one is not getting enough help they are also not likely to be getting rewards and recognition that might entice them to stay.

Table 1

Differences in Reasons for Staying Among Youth Who Left 4-H Because They Didn't Get Enough Help

Reason youth stayed in 4-H	% of all youth who stayed in 4-H for this reason	% of youth who left because they didn't get enough help in 4-H but stayed for THIS reason	% youth who left because they didn't get enough help in 4-H but stayed for OTHER reasons
I had fun	76%	20%	44%
I learned new things	72%	20%	42%
I liked the club leaders	63%	19%	41%
I enjoyed working on projects and participating in fairs	61%	19%	37%
I liked the awards and recognition I achieved and worked toward	55%	19%	33%

As Table 2 indicates, youth who left because they lost interest were less likely to have stayed in 4-H because they had fun, learned new things, took part in projects and fairs, did community service, and were able to teach others.

Finally, among youth who left 4-H because they lost interest, they were also more like to leave because friends were not in 4-H, they were not welcomed, they did not learn, did not get to make choices or were in other activities. In some ways, losing interest may result from the other reasons for leaving.

Table 2

Differences in Reasons for Staying Among Youth Who Left 4-H Because They Lost Interest

Reason youth stayed in 4-H	% youth who stayed in 4-H for this reason	% of youth who left because they lost interest in 4-H but stayed for THIS reason	% youth who left because they lost interest in 4-H but stayed for OTHER reasons
I had fun	76%	56%	77%
I learned new things	72%	56%	77%
I enjoyed working on projects participating in fairs	61%	51%	78%
I liked doing community service	56%	48%	82%
I liked teaching others things I know how to do	40%	44%	72%

Implications

Study findings provide valuable information to inform youth development staff as they create plans to improve retention in 4-H club and other youth-serving programs. An understanding of why youth join, stay, and leave a program, and especially the significant relationships found between reasons for staying and leaving, suggest the need for greater awareness around different subgroups of participants. Focusing on the cluster of reasons for staying involved as well as leaving is a potentially fruitful way to increase retention.

Opportunities to increase youth program retention must be addressed at all levels of an organization. 4-H club experiences are primarily delivered by volunteers, and therefore volunteer training and support receives key consideration in identifying strategies to encourage youth to stay in the program.

Strengthening project learning

Project learning is foundational to the 4-H program. Seventy-two percent of youth indicated they stayed in 4-H because they learned new things, and others left because they lost interest (47%) or because they did not learn what they expected to (28%). Programs can look at access to projects experiences, reflection, and sharing knowledge as ways to strengthen learning in 4-H.

Youth should be offered a variety of learning and leadership opportunities in multiple ways that support developing individual interests and potential. Volunteer training provided on how to support youth project learning, including how to understand what youth want to learn and how best to support them, will help achieve this.

Strengthening the reflection component of the experiential learning process brings out the learning. Tools can be shared with staff and volunteers to support reflection and evaluation of 4-H meetings, activities, and events. The organization can provide resources for staff and volunteers to strengthen the project and exhibition experience for youth.

Teaching others protects against losing interest, so focusing on developing mastery in youth that includes a component of sharing what they've learned with others should be implemented. Current options for teaching at local and state levels should be assessed with the organization providing volunteers with tools to assist youth in creating opportunities for teaching.

Developing positive relationships with adults and peers

Youth reported that relationships with friends (79%) and club leaders (63%) were vital reasons for staying in 4-H. Youth that liked their club leaders tended to view their experience as welcoming, learning, and supported. Organizations need to provide volunteers with tools and resources to create and strengthen a welcoming environment for 4-H clubs, 4-H project meetings, activities, and events. Staff and volunteers that are strengthening and creating a welcoming environment for 4-H youth should be recognized with examples shared across the system.

Youth left the 4-H program because their friends were not in 4-H (31%). To promote continued participation, volunteers should foster friendships within the 4-H club, project meeting or county experience. Programs should explore ways for 4-H youth to integrate friends who are not members into their 4-H experience.

Increasing the level of enjoyment

Is 4-H fun? The data says that nearly one quarter of respondents said "no." Although fun has a personal definition and perception for each individual, this is often part of the marketing strategy to potential members and families. Results indicated that youth did stay in 4-H because they enjoyed projects, fairs and events (61%).

Volunteers in leadership roles need to understand and practice providing a variety of activities and events for youth members, including involving youth in club leadership. This can be accomplished by ensuring youth provide input when decisions are made regarding organizational management, educational activities, events and recreation.

Long-established activities at all levels of the organization need to be re-evaluated from time to time to retain their vitality. Youth and adult volunteers should have the opportunity to reflect on how "fun" 4-H activities and events are, so their experiences provide insights as to whether or not change is needed. Staff and volunteers must understand what youth want to learn in order to insure a variety of opportunities are provided to addresses current personal interests of youth.

Conclusion

Paying attention to factors that are significantly related to reasons for staying in 4-H—increased project learning, positive relationships with adults and peers, and fun programs—is important to retaining youth in the program. The analysis of data suggest that if these changes are made in 4-H, significant strides will be made in keeping youth in programs.

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Journal of Youth Development
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School Sponsored Extracurricular Activities and Math Achievement among Hispanic Students

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer, 2011 **Article 110602FA004**

School Sponsored Extracurricular Activities and Math Achievement among Hispanic Students

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Abstract: Differences in math achievement between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities at an inner-city campus in the State of Texas were examined for the 2008-2009 academic year. The Texas Assessment of Knowledge and Skills (TAKS) Math exam served as the measure of student achievement. Hispanic eighth grade students who were involved in extracurricular activities had statistically significantly higher scores as well as higher passing percentages than did Hispanic eighth grade students who were not involved in extracurricular activities on the TAKS Math exam. Implications are presented and recommendations for future research are made.

Introduction

Hispanic students are the largest and fastest growing ethnic group attending public schools in the United States today (Salazar, et al., 2008). "The term, Hispanic, is widely used by social scientists to refer to a very diverse group of people who share a history of Spanish colonialism in the American continent" (Arbona, 1995, p. 37). In addition, more than two-thirds (69%) of Hispanic students attending public schools are of Mexican origin (Fry & Gonzales, 2008). Hispanics, as a group, tend to have the lowest levels of educational attainment and the highest dropout rate in the nation (Ream & Rumberger, 2008; U.S. Department of Education, National Center for Education Statistics, 2005). Furthermore, Hispanic students' academic struggles have resulted in an achievement gap with White and Asian American students that persists year after year (Austin, Hanson, Bono, & Cheng, 2007).

Because Hispanic students are being outperformed by their Non-Hispanic counterparts (Austin et al., 2007), state policymakers and education practitioners may rely on research studies to learn about effective programs or interventions to increase academic achievement among Hispanic students. For example, researchers have confirmed the value and benefits of participation in extracurricular activities with respect to higher academic achievement as well as other factors that contribute to school success such as good behavior and an increased sense of

school connectedness (Brown & Evans, 2002; Stephen & Schaben, 2002). Researchers, however, have not thoroughly examined these relationships among Hispanic students. Thus, the current study was conducted to add to the limited research on the effect that school sponsored extracurricular activities have on Hispanic eighth grade students' math achievement.

Review of Related Literature

Numerous studies have been conducted with respect to the relationship between extracurricular activities and academic achievement. An analysis of middle school students revealed statistically significant differences in academic performance between students who participated in extracurricular activities and students who did not participate in extracurricular activities (Caskey, 2006). In another study, Stephen and Schaben (2002) asserted that boy and girl athletes had statistically significantly higher California Achievement Test (CAT) math scores as well as higher math grades than nonathletes of the same sex. An analysis of covariance was used in yet another study to examine the connections between participation in eighth grade extracurricular activities and academic achievement. An association was demonstrated between extracurricular activities and higher grades, school value (i.e., greater emphasis placed on college), self-esteem, resiliency, positive friendships, and lower levels of risky behavior (Fredricks & Eccles, 2008). In addition, Broh (2002) used National Educational Longitudinal Study (NELS) data to demonstrate that participation in sports positively affected students' math achievement scores, college attendance, and educational aspirations. Thus, researchers have argued that involvement in school sponsored extracurricular activities provides students with numerous noteworthy benefits (Broh, 2002; Brown & Evans, 2002; Fredricks & Eccles, 2008; Stephen & Schaben, 2002).

Researchers have particularly studied the relationship between extracurricular activities and academic performance in adolescents. Darling, Caldwell, and Smith (2005) conducted a longitudinal study concerning extracurricular activities and their effect on academic performance. Hence, students were provided with a survey containing a list of 20 different extracurricular activities and asked to indicate in which extracurricular activities they participated that year. Students were also queried about their academic goals and their grade point average. Darling, et al. (2005) reported that adolescents who participated in school-based extracurricular activities had higher grades, higher academic aspirations, and more positive attitudes toward school than the students who were not involved in any extracurricular activities.

Researchers also determined that adolescents who were involved in extracurricular activities had less encounters with drug use (Mahoney, 2000; Zaff et al., 2003). An environment with positive peer and adult influences strengthens the adolescents' commitment to school and decreases their probability of drug use. Ream and Rumberger (2008) also studied the effects of participation in extracurricular activities on Mexican American students and documented that the students who participated in such activities were more likely to stay in school and be academically successful than were students who had not participated in extracurricular activities. Adolescents' sense of connectedness to their school has been attributed by several researchers as an important predictor of school success (Brown & Evans, 2002; Caskey, 2006). Researchers have also concluded that European American students were statistically significantly more involved in extracurricular activities than were Hispanic students, but regardless of ethnicity, all students who participated in extracurricular activities had greater levels of school connectedness than students who did not participate in such activities (Brown & Evans, 2002).

Due to the amount of time spent in school, many researchers consider schools to be primarily responsible for helping students achieve success not only academically but socially as well (Bulach, Lunenburg, & Potter, 2008; Fredricks & Eccles, 2008; Lunenburg & Ornstein, 2008). Hence, several researchers have examined the effects of extracurricular activities on the cognitive, behavioral, and social outcomes of children and adolescents, which lead to academic achievement (Brown & Evans, 2002; Fredricks & Eccles, 2008; Stephen & Schaben, 2002). Conclusions in these studies have led them to suggest that involvement in extracurricular activities has a positive impact on students' academic outcomes.

In addition, researchers have investigated the impact that involvement in extracurricular activities has on students' motivational orientation (Brown & Evans, 2002). Maslow developed a model of motivation based on needs, stemming from the most basic physiological needs, through emotional needs, and finishing with the need to develop one's innate potential (Huitt, 2004). The model is often displayed as a pyramid, with the basic needs at the bottom and the aesthetic needs at the top. Maslow's theory emphasizes our survival needs must be satisfied first (Huitt, 2004). Due to struggles with low economic status and low self-esteem, Hispanic students may be preoccupied with meeting basic needs of food, shelter, and belongingness than with striving for academic excellence. Previous researchers have reported that involvement in extracurricular activities is associated with higher levels of school connection, school satisfaction, educational expectations, and occupational expectations that contribute to the academic achievement of secondary students (Brown & Evans, 2002; Davalos, Chavez, & Guardiola, 1999; Fredricks & Eccles, 2008; Stephen & Schaben, 2002). Thus, a primary focus of the present research is to develop an integrated understanding of the influence school sponsored extracurricular activities have on Hispanic students' math academic achievement.

Statement of the Problem

Even though the number of Hispanic students meeting the passing standards on the TAKS Math test has increased over the years, they continue to perform below the state average (TEA, online, http://www.tea.state.tx.us/perfreport/aeis/about.aeis.html). Specifically, for the 2008-2009 academic year, 77% of Hispanic students in eighth grade passed the first administration of the TAKS Math test in the State of Texas, which improved from 73% for the year 2007-2008. However, the passing rate for eighth graders in the State of Texas on the same exam for the years 2008-2009 and 2007-2008 were 82% and 79%, respectively. Thus, a need exists to implement research-based interventions that have been documented to be effective in assisting and motivating Hispanic students to become academically successful and in turn close the existing achievement gap.

Significance of the Study

The findings of this study may add to the limited body of research that seeks to investigate how involvement in school sponsored extracurricular activities is related to the academic achievement of Hispanic secondary students. In addition, policymakers, educational leaders, and communities may use these findings as a means to promote and ensure more involvement in school sponsored extracurricular activities among Hispanic students by modifying campus improvement plans or hiring additional personnel to promote academic success.

Purpose of the Study

The purpose of this study was to determine the extent to which a relationship existed between school sponsored extracurricular activities and academic achievement. Therefore, differences

were examined in math achievement between Hispanic students in eighth grade who participated in school sponsored extracurricular activities and the Hispanic students in eighth grade who did not participate in school sponsored extracurricular activities for the 2008-2009 academic year. Moreover, the percentage of students who met the passing standard on the TAKS Math test was also compared between the two groups of interest.

Research Questions

In this study, the following research questions were addressed:

a) What is the difference in math achievement between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities? and

b) What is the difference in the percentages of students who met the passing standard on the TAKS Math test (i.e. TAKS Math scale score = 2100) between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities?

Method

Participants

Data from the May 2009 administration of the TAKS Math exam for 317 Hispanic eighth grade students were obtained for this study. The students were enrolled in an inner-city middle school in the State of Texas. In the 2008-2009 academic year, this campus earned an Academically Acceptable TEA Rating and had a student enrollment of 1,065 students (i.e., 90.5% Hispanic; 7.4% African American; 1.9% White; 0.2% Asian/Pacific Islander). To examine the relationship between school sponsored extracurricular activities and math achievement among Hispanic eighth grade students, TAKS Math exam scores were analyzed for 110 Hispanic eighth graders who participated in school sponsored extracurricular activities and 207 Hispanic eighth graders who did not participate in school sponsored extracurricular activities. School sponsored extracurricular activities were generally defined as sports (e.g., basketball, baseball, football, and soccer) and clubs (e.g., karate, cheerleading, band, and mariachi) that took place before school, after school, and/or weekends.

Instrumentation

The TAKS Math test administered during the 2008-2009 academic year served as the measure of the Hispanic eighth grade students' math achievement in this study. The TAKS Math test is an intact instrument developed by committees that consisted of teachers from school districts across the state, test development specialists, and Texas Education Agency (TEA) staff members. The content validity of the TAKS test is directly related to the statewide curriculum. To obtain the highest level of content validity, committees were formed to align the content of the TAKS test systematically to the Texas Education Knowledge and Skills (TEKS). Items were developed and reviewed in numerous stages by Texas educators, which provided supportive strong evidence of content validity of the TAKS tests. Furthermore, the input from many different people with different backgrounds reduced the likelihood that the test items would be written from bias by a single author (Texas Education Agency, 2008).

In addition, a contrasting-groups study was conducted to examine the construct validity of TAKS test as well. Through the TAKS Higher Education Readiness Component, TEA collected and compared performance data for the exit level mathematics and English language arts tests for a sample of college students at two-year and four-year colleges in the state and high school

students (TEA, 2008). Evidence for criterion-related validity for the TAKS was also provided as part of the TAKS Higher Education Readiness Component. This concurrent validity study was conducted in 2003-2004 to examine the correlation of students' performance on exit level TAKS with their performance on national testing programs (TEA, 2008).

Test reliability refers to how accurately an assessment measures student learning. Thus, the following internal consistency procedures were used to determine test reliability for the TAKS tests: Kuder-Richardson Formula 20 (KR20) for tests involving multiple-choice items and the stratified coefficient alpha for tests involving short-answer and extended response items (TEA, 2008). The internal consistency reliabilities for the TAKS tests range from .87 to .90.

Procedures

The study was conducted by selecting the year of interest, the corresponding campus files (i.e., participation in school sponsored extracurricular activities and TAKS Math test scale scores) for the year of interest, and the variable to be examined (i.e., math achievement). The TAKS Math scores for the Hispanic eighth grade students enrolled at an inner-city middle school campus for the 2008-2009 academic year were acquired from a TEA campus performance report. This report, which listed the eighth grade students' names, identification numbers, and TAKS test performance results, served as the master file. In addition, campus staff in charge of school sponsored extracurricular activities were each provided with a separate file of all the eighth grade students enrolled for the year 2008-2009 listed by name, identification number, gender, and ethnicity. The campus sponsors reported data in reference to student participation in school sponsored extracurricular activities by specifying which activity, if any, the students participated in next to their names. Only the Hispanic eighth grade students' data (i.e., participation in school sponsored extracurricular activity, gender, and ethnicity) were obtained from this file and transferred to the master file, whereas Non-Hispanic students' data were omitted from the master file. Lastly, all of the data were converted into a database suitable for analysis by the Statistical Package for the Social Sciences (SPSS) – PC Version 17.0. The database included the students' identification numbers, TAKS Math scale scores, involvement in school sponsored extracurricular activities (1 = Participate; 2 = Did Not Participate), gender (1 = Boys; 2 = Girls), grade (1 = eighth grade), and ethnicity (1 = Hispanic). The participants' confidentiality and privacy were ensured by the omission of their names on the SPSS file.

Results

Table 1 presents descriptive statistics for Hispanic eighth grade students' TAKS Math scale scores as a function of participation in school sponsored extracurricular activities. A check for assumption of normality was conducted, and the assumption was met. Specifically, for the Hispanic eighth grade students who participated in school sponsored extracurricular activities, the standardized skewness coefficient (i.e., the skewness value divided by the standard error of skewness) of 1.22 and the standardized kurtosis coefficient (i.e., the kurtosis value divided by the standard error or kurtosis) of 2.32 fell within the normal acceptable parametric ranges of -3.00 and +3.00, which indicated no serious departure from normality (Onwuegbuzie & Daniel, 2002). Similarly, for the Hispanic eighth grade students who did not participate in school sponsored extracurricular activities, the standardized skewness coefficient of 1.66 and standardized kurtosis coefficient of -0.25 were within the limits of normality. Thus, a parametric analysis was conducted with the use of an independent samples *t*-test to compare math achievement between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities. Independent samples *t*-tests are the appropriate

statistical procedures to use when the independent variable is a categorical or grouping variable (i.e., participation in school sponsored extracurricular activities) and the dependent variable is a continuous variable (i.e., TAKS Math scale scores) that is normally distributed.

Table 1

Descriptive Statistics for Students' TAKS Math Scale Scores as a Function of Participation in School Sponsored Extracurricular Activities

Participation in School Sponsored Extracurricular Activities	*n*	*M*	*SD*
Participate	110	2201.94	176.84
Did Not Participate	207	2129.87	180.82

The independent samples *t*-test indicated a statistically significant difference was present between Hispanic eighth grade students who participated in school sponsored extracurricular activities and Hispanic eighth grade students who did not participate in school sponsored extracurricular activities, $t(226.74) = 3.43$, $p = .001$. Specifically, Hispanic eighth grade students who participated in school sponsored extracurricular activities had higher scale scores on the TAKS Math test than the Hispanic eighth grade students who did not participate in school sponsored extracurricular activities. The effect size for this difference was small, 0.40 (Cohen, 1988).

Table 2 presents a frequency distribution of TAKS Math scale scores of 110 students who participated in school sponsored extracurricular activities and 207 students who did not participate in school sponsored extracurricular activities. The passing standard for students on the TAKS Math exam is reported with a scale score of 2100. Specifically, for Hispanic eighth grade students who participated in school sponsored extracurricular activities, the percentage of students meeting or exceeding the passing standard was 79.1%, whereas for Hispanic eighth grade students who did not participate in school sponsored extracurricular activities, the percentage of students meeting or exceeding the passing standard was 64.7%. Thus, an analysis of frequency tables demonstrates a pattern of difference between groups.

Table 2

Frequency and Percentages of TAKS Math Scale Scores for Students Who Participated in School Sponsored Extracurricular Activities and Students Who Did Not Participate in School Sponsored Extracurricular Activities

TAKS Math Scale Scores	Participate *n* and Percentage of Total	Did Not Participate *n* and Percentage of Total
000 - 419	0 (0.00%)	0 (0.00%)
420 - 839	0 (0.00%)	0 (0.00%)
840 - 1259	0 (0.00%)	0 (0.00%)
1260 - 1679	0 (0.00%)	0 (0.00%)
1680 - 2099	23 (20.9%)	73 (35.3%)
2100 - 2519	80 (72.7%)	128 (61.8%)
2520 - 2939	7 (6.4%)	6 (2.9%)

Discussion

In this study, the effect of school sponsored extracurricular activities on math achievement was analyzed. The overall TAKS Math scale scores of students who participated in school sponsored extracurricular activities were statistically significantly higher than students who did not participate in school sponsored extracurricular activities. The mean TAKS Math scale score of students who participated was 2202, whereas the mean TAKS Math scale score of students who did not participate was 2130. Thus, the results of this study are consistent with the results in the review of literature. Several investigators (e.g., Broh, 2002; Brown & Evans, 2002; Caskey, 2006; Darling, Caldwell, & Smith, 2005; Davalos, Chavez, & Guardiola, 1999; Fredricks & Eccles, 2008; Mahoney, 2000; Stephen & Schaben, 2002; Zaff et al., 2003) determined positive correlations between participation in school sponsored extracurricular activities and academic achievement as well as other factors that contribute to school success such as behavior and feelings of school connectedness. Education practitioners and school leaders are encouraged to seek out ways to involve students in school sponsored extracurricular activities. The benefits that extracurricular activities offer students in secondary schools have been established by previous researchers and have been supported in the current study.

In any study of school sponsored extracurricular activities, the issue of self-selection must be addressed. Self-selection might be the result of student choice or institutional selection. Over half (i.e., 207 of 317) of the Hispanic eighth graders enrolled during the 2008-2009 academic year at an inner-city middle school campus with a predominantly Hispanic student population did not participate in school sponsored extracurricular activities. The questions that must be asked by a researcher are, "Why do students choose not to participate?" and "What cultural or socioeconomic influences may play a part in these findings?" In some cases, more students participate in school sponsored extracurricular activities in a smaller campus than in a bigger campus. Thus, researchers should also examine whether the size of the campus may be a contributing factor for nonparticipation. The reasons for non-participation comprise an area

that needs to be investigated further, especially if benefits exist for students who choose to participate in extracurricular activities.

The researcher placed several limitations on this study by not investigating middle school students from other grade levels (e.g., sixth or seventh grades) or from other ethnic groups. Thus, the sample consisting only of Hispanic eighth grade students limits generalizability. Furthermore, the data collected in this study constituted only one year of TAKS Math test data. Therefore, it is unknown whether the findings of the current study would be similar to studies in which TAKS Math test data for Hispanic eighth grade students were analyzed across multiple years. Another limitation of the study was the selection of non-random groups that differed only on their participation in school sponsored extracurricular activities. Hence, further research can include control procedures to ameliorate the effect of an external variable such as students' socioeconomic status and teachers' years of teaching experience that may influence the significance of the study. Lastly, analysis by specific school sponsored extracurricular activity (e.g., sports, band, karate, cheerleading, or mariachi) was not conducted in this study. A future study could undertake this endeavor as well. Until support from additional studies is available, readers are cautioned with respect to making generalizations pertaining to findings from the current study.

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Journal of Youth Development
Bridging Research & Practice

Factors Influencing 4-H Club Enrollment and Retention in Georgia

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602FA005**

Factors Influencing 4-H Club Enrollment and Retention in Georgia

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Abstract: Middle school aged 4-H member participation is on the decline across the nation. Research has identified reasons for declining 4-H club participation, including conflicting time commitments (with school and community activities) and opinions that the program was boring or for little kids. This study sought to gain a clearer understanding of why 4-H member involvement in Camden County, Georgia has steadily declined in recent years. The most prevalent reason listed for leaving the Camden County 4-H program was that the 4-H meeting conflicted with school and community activities. Other reasons listed included wanting to be with friends in a relaxed setting, not liking the activities and lessons at the special interest club meetings, and not feeling welcome in the 4-H club meetings. The 4-H members who continued with the program had 100% parental involvement – the number one indicator of continued 4-H participation.

Introduction and Literature Review

Why do 4-H Members Drop Out?

Recruiting youth in 4-H programs is a priority for youth development professionals. From a youth development standpoint, retaining youth is even more important. There are a number of factors influencing declining rates of youth involvement in 4-H clubs. Previous studies have identified reasons youth drop out of 4-H clubs, including: not understanding the 4-H program, not feeling welcome, conflicting time commitments, opinions that the program was boring or for younger youth, not having the financial ability to pay for some of the programs, an inability for parental involvement such as transportation, a lack of assistance with their project, and project clubs not meeting enough or having appropriate activities (Astroth, 1985; Borden, Perkins, Villarruel, & Stone, 2005; Digby & Ferrari, 2005a; Ritchie & Resler, 1993; Weiss, Little, & Bouffard, 2005). Still other youth drop out of 4-H and other youth development programs because they are growing developmentally, gaining feelings of independence, and wish to demonstrate such independence by removing themselves from programs typically associated with younger audiences (Heinsohn & Lewis, 1995).

What Keeps 4-H Members Enrolled?

With an increase in programs offered by the school system and community, students must make decisions about 4-H participation. Often county-level 4-H programs become entirely after school-based programs once the 4-H members enter middle school (sixth grade) (Georgia 4-H Junior Task Force, 2000). Likely reasons for deciding to continue to participate in 4-H clubs in middle school include youth satisfaction with what the program offers and with what they get out of it. Factors that keep 4-H'ers most satisfied with 4-H clubs include: high quality 4-H club meetings, high levels of responsibility, high commitment, positive parental involvement and support, a positive experience with competition, opportunities to work with younger members, gender (girls more satisfied than boys), safe environment, feeling of belonging, time with friends, learning new things and high participation in 4-H activities (Digby & Ferrari, 2005a; Ferrari & Turner, 2006; Norland & Bennett, 1993). They also found that youth were more satisfied with the 4-H program overall when they had the "opportunity to participate in older member activities, positive experiences with competition, and participation in club, county, state, and national activities" (Norland & Bennett, 1993, Findings section, para. 2).

Support and involvement from parents and adult volunteer leaders during activities and club meetings also influence the likelihood of 4-H members continued involvement (Hartley, 1983; Ladewig & Thomas, 1987). Ferrari and Turner (2006) found that youth joined and participated in youth programs as a result of caring adults, homework assistance, a positive physical and psychosocial environment, program opportunities, and a fun atmosphere where character and life skills could be developed in the company of friends. If 4-H members completed a project and received recognition, they are also more likely to feel positive about the program, to re-enroll and continue their participation (Hartley, 1983; Radhakrishna, Everhart, & Sinasky, 2006).

What Retains 4-H Members Over Time?

Once a youth organization finds the "hook" to attract youth to join, it must develop strategies to have continued interest in the program. After all, teens are voluntarily participating in the programs. Flexibility in activities and schedules is one way to maintain interest and retain youth (Heinsohn & Lewis, 1995). Others suggest increasing the likelihood of youth retention involves encouraging participation of first year club members in 4-H activities, using personal and tangible recognition frequently, designing activities to meet the needs and expectations of 4-H members, and planning 4-H activities to encourage whole family participation (Hartley, 1983). It is also important for teen members to feel a sense of ownership and belonging and to be given leadership roles by sharing their knowledge and experiences (Ladewig & Thomas, 1987; Norland & Bennett, 1993; Ritchie & Resler, 1993). A mentoring system with older members assisting younger or first year members can also help retention rates (Astroth, 1985; Harder et al, 2005; Norland & Bennett, 1993).

Local Situation: Camden County, Georgia

Retaining active 4-H members beyond the fifth grade is a challenge in Camden County, Georgia. During the 2005–2006 school year in Camden County, Georgia, the total enrollment in fifth grade 4-H was 547 students. Of the total enrollment, 100 were involved in at least one activity or event outside of the in school club meeting. In the following 2006–2007 school year, only 40 of the 100 formerly active fifth graders reenrolled in 4-H. Only 17 active 4-H members from the previous year reenrolled in the seventh grade. While Camden County had approximately 698 sixth graders enrolled in the 2006–2007 school year, only 48 of these sixth graders were active in 4-H (State of Georgia Department of Education, Governor's Office of Student Achievement, 2007).

The reenrollment numbers were even lower for the fifth graders that were active in the 2007 4-H year. During the 2006–2007 school year in Camden County, the total enrollment in fifth grade 4-H was 678 students. Of the total enrollment, 115 were involved in at least one activity or event outside of the in school club meeting. In the following 2007–2008 school year, only 29 of the 115 formerly active fifth graders re-enrolled and became an active 4-H member in the sixth grade. Of these only 14 active 4-H members from the previous year continued in the seventh grade. While Camden County had approximately 737 sixth graders enrolled in the 2007–2008 school year, only 39 of these sixth graders were active in 4-H their sixth grade year (State of Georgia Department of Education, Governor's Office of Student Achievement, 2008). Given these trends, the purpose of this study was to determine contributing factors and possible remedies for the decline in the enrollment and retention of middle school (6^{th} – 8^{th} grade) youth in the Camden County, Georgia 4-H club program.

Objectives

The objectives of this study were to:

1. Determine the rate of and influences on the reduction in participation in 4-H programs among 6^{th} – 8^{th} grade 4-H members who were formally active in 4-H in the fifth grade;
2. Determine if participation in project achievement, club meetings, judging events, special interest clubs, summer fun trips and/or camp relates to continued participation in 4-H;
3. Determine the reasons why active 4-H members continue to participate in 4-H; and
4. Determine what recruitment and retention efforts should be offered to provide a more attractive 4-H program to sixth grade Cloverleaf and Junior (7^{th} – 8^{th} grade) 4-H'ers.

Methods

The study population consisted of "active" 4-H members from the 2006 4-H year (2005–2006) and the 2007 4-H year (2006–2007). The youth included in this audience were determined from information retrieved from county-reported information on the Georgia Cooperative Extension 4-H Enrollment Database. The term "active member" is defined as an individual that is involved in activities outside of monthly club meetings including project achievement, judging events, special interest clubs, summer fun trips and/or summer camp.

Part One: Trends in Secondary Data

The research design consisted of a two part study. Part one was an ex post facto study analyzing information in the 4-H Enrollment Database for Camden County from the 2006 and 2007 4-H years. The secondary data allowed the researchers to identify trends in participation in 4-H activities and determine if a relationship existed between participation and continued enrollment in 4-H. Part one also examined sixth and seventh grade 4-H members who began 4-H during their fifth grade year to determine if past participation increased their likelihood to remain involved in 4-H.

The population for this ex post facto study included 100 active fifth grade 4-H members in the 2006 4-H year and 115 active fifth grade 4-H members in the 2007 4-H year. Within the Enrollment Database, these 4-H members were categorized into:

a) 4-H members that were active in the fifth grade that reenrolled in 4-H in the sixth grade,
b) 4-H members that were active in the fifth grade that did not reenroll in 4-H in the sixth grade,

c) 4-H members that were not actively involved in 4-H until the sixth grade,

d) 4-H members that were active sixth grade participants that reenrolled,

e) 4-H members that were active sixth grade participants that did not reenroll,

f) 4-H members that were active fifth grade participants that skipped a year and reenrolled as a seventh grade 4-H member, and

g) 4-H members that were not actively involved in 4-H until the seventh grade.

Search functions within the database were used to identify and select 4-H members meeting these criteria.

Part Two: Questionnaire

Part two was a needs assessment questionnaire distributed to 4-H members (with parental permission) who were actively involved in 4-H during their fifth grade years for the 2006 and 2007 4-H year and reenrolled in their sixth grade year. The questionnaire was used to determine the reasons 4-H members did or did not reenroll in the 4-H program. The questionnaire also asked youth to share their thoughts on programs and activities that should and should not be offered.

The sample population for the questionnaire was self selected by the participants reenrolling in 4-H in their sixth grade year after being active in at least one after school activity or event in their fifth grade year. Sixth graders that were new to being actively involved in the 4-H program were also included in the sample.

The questionnaire was peer reviewed by Camden County Cooperative Extension and 4-H staff members, other 4-H staff in the district, and the Camden County 4-H advisory board for face and content validity. The questionnaire was pilot tested in the summer of 2009. It was mailed to 52 possible survey participants, resulting in a 23% (n = 12) response rate. The researchers recognize that a sample size of 12 is low for calculating Cronbach's alpha so multiple follow ups with non-respondents were used to try to boost the number of respondents for the pilot test. The maximum number of respondents that could be achieved was 12. Responses were compiled and entered into SPSS 14.0 where reliability (Cronbach's alpha) was calculated for the scales on the instrument. Internal consistencies of all instrument constructs were at least α=0.85, indicating acceptable reliability.

Following the pilot test, the questionnaire was mailed to the active sixth grade 4-H members from the 2007 and 2008 4-H years (N = 115) with a letter of description, a letter requesting parental consent, a letter requesting youth assent, and a pre-addressed stamped envelope. Procedures outlined by Dillman (2000) were followed in an attempt to maximize response rates and reduce non-response error. After two follow-up contacts, 23 responses to the questionnaire were collected.

Data Analysis

Descriptive statistics (frequencies and percentages) were used to summarize the secondary data in the ex post facto study and the quantitative responses to the questionnaire. Responses to open-ended questions on the questionnaire were summarized using domain analysis, including open-coding and color coding procedures (Spradley, 1980).

Findings

Objective #1: Rate of and influences on reductions in 4-H club participation: Gender

The gender of the groups that were not retained for both years was 57 males (26.5% of total) and 83 females (39% of total). Comparing male and female 4-H member retention over the two years revealed that 65% of both male and female members dropped out. Therefore, gender had minimal influence on rate of leaving the 4-H club.

Retention

There was a substantial decline in the number of members returning that were previously active in the 4-H program (Table 1). In the 2005 – 2006 year, 57% (n = 57) of the formally active fifth graders did not reenroll in 4-H for their sixth grade year. Of the 40 returning members (40%), 25 (63%) did not reenroll for their seventh grade year. From the fifth graders that were active in the 2006 – 2007 year, 83 members (72%) did not return. Of the 29 members that did reenroll in 4-H for their sixth grade year, 15 members (52%) did not reenroll their seventh grade year. With the yearly demonstration, there is a marked decline in participation every year with a specific emphasis in the 2007 – 2008 year with 63% of the first group of fifth graders and 72% of the second group not returning to the 4-H program after being active in the previous year. It is unknown what contributed to the decline in this specific year.

Table 1

4-H Club Participation by Grade Level (N = 53)

Grade Level	*f*	% of Total in Category	Rate of Decline (%)
Active in 5th Grade	23	100	0
Active in 6th Grade	21	91	9
Active in 7th Grade	17	74	19
Active in 8th Grade	14	61	18
Active in 9th Grade	8	35	43

Reasons for no longer participating in the 4-H club

The most prevalent reason listed for leaving the 4-H program was that the 4-H meeting conflicted with school and community activities (30%). Other reasons listed included wanting to be with friends in a relaxed setting (n = 5), not liking the activities and lessons at the special interest club meetings (n = 5), and not feeling welcome in the 4-H club meetings (n = 5). The open response questions related to no longer participating yielded themes of "involvement in other activities," "feeling 4-H was just for fifth graders," and "club meetings were boring or not interesting."

Comparisons were also made between the six youth respondents that did not reenroll in 4-H after their sixth grade year and the 17 that did reenroll after their sixth grade year and, in some cases, were retained through the seventh, eighth, and ninth grade years. Compared to youth who were retained, more youth who left the 4-H program indicated reasons for leaving such as that 4-H was boring (50% compared to 0%), there were scheduling conflicts (50% compared to 25%), and displeasure with activities in club meetings which resemble formal, structured classroom activities (83% compared to 12%). Researchers have found that youth and parents do not want their after school time to be associated with more school (Anderson-Butcher, 2005) and desire less structure and more flexibility (Marcazk, Dworkin, Skuza, & Beyer, 2006).

Objective #2: Participation in specific activities and continued 4-H club participation

The 4-H members that joined 4-H in 2005 and remained active through their seventh grade year participated in core program activities more than other youth (Tables 2 and 3). The researcher also compared the six respondents who did not reenroll in 4-H after their sixth grade year to the 17 who did reenroll after their sixth grade year and in some cases were retained through the seventh, eighth, and ninth grade years.

Table 2

Number of 4-H Activities by Category and Year for the 2005 – 2006 Active Fifth Grade 4-H Members

	2005 – 2006 Fifth Grade		**2006 – 2007 Sixth Grade**		**2007 – 2008 Seventh Grade**	
	n = 240		n = 142		n = 113	
4-H Categories	*F*	%	*f*	%	*f*	%
Core Programs	102	43	64	45	32	29
Judging & Competitive Events	32	13	33	23	20	18
Special Interest Clubs	0	0	1	1	9	8
Leadership Conferences	0	0	0	0	4	3
Recognition	45	19	9	6	0	0
Helping	0	0	8	6	18	16
Fun Trips & Events	61	25	27	19	30	26
Total	240	100	142	100	113	100

Note: n = number of activities, *f* = number of participants in the category

The 4-H members who continued with the program participated more in district and state activities. The members who dropped out may have left too early to see the benefits of the district and state activities because many are not available until the 4-H member has reached the seventh grade.

Table 3

Number of 4-H Activities by Category and Year for the 2006 – 2007 Active Fifth Grade 4-H Members

	2006 – 2007 Fifth Grade		**2007 – 2008 Sixth Grade**		**2008 – 2009 Seventh Grade**	
	n = 261		n = 111		n = 55	
4-H Categories	*F*	%	*f*	%	*f*	%
Core Programs	89	34	39	35	21	38
Judging & Competitive Events	81	31	18	16	15	27
Special Interest Clubs	0	0	12	11	7	13
Leadership Conferences	0	0	0	0	1	2
Recognition	55	21	8	7	2	4
Helping	0	0	4	4	9	16
Fun Trips & Events	36	14	30	27	0	0
Total	261	100	111	100	55	100

Note: n=number of activities. *f* = number of participants in the category

Regardless of whether they remained in 4-H or dropped out, 4-H members who began 4-H in the 2006 4-H year participated in core programs and received similar amounts of recognition. For 4-H members who began 4-H in the 2007 4-H year, the members who were retained had higher participation percentages in every category except judging and competitive events (Table 4). Forty-eight percent of the members who left the 4-H program participated in judging and competitive events. Participation in such events may have contributed to their withdrawal from the 4-H club.

Table 4

Members Retained for 2006 – 2008
Participating in at least One Project from a Given Category

	Retained (n = 15)				Not Retained (n = 83)	
	2006 – 2007		2007 – 2008		2006 – 2007	
Project Categories	*f*	%	*F*	%	*f*	%
Core Programs	13	87	11	73	46	55
Judging & Competitive Events	5	33	3	20	40	48
Special Interest Clubs	N/A	--	2	13	N/A	--
Leadership Conference	N/A	--	N/A	--	N/A	--
Recognition	7	47	3	20	33	40
Helping	N/A	--	1	7	N/A	--
Extra Fun Trips & Events	5	33	5	33	15	18

The competitive experience may be part of the reason the members not retained decided to not reenroll (Albright, 2008). When analyzing these participation results, one conclusion could be that this study's participants contradict the research by Hartley (1983) and Norland and Bennett (1993) who found that participation contributes to reenrollment. However, when comparing the participation percentages of the group of 4-H members who were retained for three years to the groups who were retained for only one or two years, the results show that the 4-H members retained the longest participated in more activities overall.

Objective #3: Reasons for continuing to participate in the 4-H club

The questionnaire asked youth respondents to share any reason that contributed to their decision to continue participating in 4-H. Of the 53 questionnaires mailed to participants, 23 completed questionnaires were returned (43% response rate). Responses were grouped into similar themes/domains and compared based on frequency of being mentioned (Spradley, 1980). The domain "learning and life skill development" had the most responses, followed by "parental support." Participation in activities as a fifth grader and the S.A.F.E. shooting sports program also led many of the respondents to continue with the 4-H program. 4-H members liked being given responsibility by setting and achieving goals. Additional reasons 4-H members continued to participate in 4-H were because they felt 4-H was fun, liked learning new things, and enjoyed 4-H events including camp.

Respondents were also asked whether participation in judging events and special interest clubs influenced their decision to continue participating. Neither judging events (n = 16, 70%) nor special interest clubs (n = 19, 83%) influenced their decision to continue participating in 4-H. This could imply that participating in these activities also did not contribute to respondents reenrolling in the following years.

Differences were found when reasons for continuing with the 4-H program were compared between those who dropped out and those who reenrolled. These included participation in judging events (0% vs. 35%), desire to participate in state and district activities (0% vs. 65%), wanting to be a teen leader (33% vs. 71%), liking the 4-H activities (17% vs. 88%), parents being involved in the program (17% vs. 100%), motivation to succeed (33% vs. 71%), and the desire to be given additional responsibility (17% vs. 65%).

The 4-H members that remained with the program responded often to having their parents involved in the 4-H program. The 4-H members that continued with the program had 100% parental involvement. Parents are able to be involved in the 4-H program by serving as a leader or coach of a special interest club or judging event, serving as a volunteer at events, or being part of the 4-H advisory board. Norland and Bennett (1993) found that positive parental involvement was a factor that led to more satisfaction with the program by youth.

Program participation was also influenced by a desire to build leadership skills. Club members who continued with the program wanted to be teen leaders, achieve their goals, succeed, and have additional responsibility. Norland and Bennett (1993) noted that 4-H members strive to be given responsibility and leadership roles. Ferrari and Turner (2006) found that among many other factors, development of life skills was a reason that youth participated in youth programs such as 4-H.

Objective #4: Recruitment and retention efforts to enhance participation

Marketing in order to acquire new members and recognizing current members is important to the success of a 4-H program. Respondents selected promoting new activities (n = 22, 96%), promoting opportunities to be with friends (n = 21, 91%), and promoting 4-H at open house (N=21, 91%) as potential methods of recruitment. In terms of specific recruitment strategies, the recruitment method suggested most by respondents (n = 19, 83%) was for 4-H leaders to follow up with current members who miss club meetings. 4-H members recruiting their friends was also suggested as an effective recruitment strategy (n = 17, 74%). Digby and Ferrari (2005b) found similar recruitment recommendations.

Promoting the 4-H Program

Youth respondents were asked to provide recommendations for promoting the 4-H program in their communities. Responses recommended promoting 4-H around the community with posters, in parades, and at local festivals. Another common suggestion for promoting the program was to host 4-H special events such as games, road trips, 4-H 5K road races, National 4-H Days, 4-H kayak/canoe trips, and community environmental clean ups.

New activities were also suggested by youth in the form of special interest clubs. Clubs requested included general projects, recycling, music, art, first aid, archery, poultry, and a football team. However, questionnaire results showed that special interest clubs currently had the lowest number of participants. Respondents did not feel that the special interest clubs affected their reasons for continuing with the program. Of the 4-H members that were retained, very few participated in the special interest clubs. This could be because they did not know about the clubs or understand their purpose.

Conclusions, Implications, and Recommendations

4-H Club Development

Four main implications for 4-H programs have emerged from the data; focus on fun, schedule considerations, community based programs, and parental support. These four implications are examined in the following pages.

1. Focus on fun

Camp, special events, and trips were referred to often as reasons for returning and as recommended methods of recruitment. Youth want to have fun and most 4-H members recognize 4-H as fun. Leaders should design programs to incorporate youth desire for leisure and variety over a more traditional, "school-based" approach. Additional work is needed to ensure that 4-H leaders do not only focus on the educational aspects of programs, but also maintain fun as one of the key components of their programs and ensure that fun is purposively included in 4-H activities.

2. Schedule considerations

Former 4-H members were busy or were not satisfied with the 4-H program. One participatory approach to 4-H programming would be to ask youth about their schedules, interests, and ideal times to meet. As youth increase in age so do their opportunities for activities; sports, extra-curricular school activities, employment, and dating all increase in importance. As youth obligations in other activities increase with age, 4-H and other youth development programs will have to adapt their marketing strategies to demonstrate their relevance. 4-H programs must appear more attractive to youth than competing opportunities or adjust meeting schedules to avoid conflicting with these other activities.

3. Community based programs

It is important to determine the interest in and need for special interest clubs and judging events before initiating and promoting new programs. 4-H members indicated individual interest in possible special interest club topics. However participation in previous special interest clubs has been low in Georgia. Given their traditionally higher levels of participation, core programs can be the hook to get youth more involved in 4-H clubs. Once youth are involved in the core programs, leaders should determine youth interest in specific special interest clubs. It is recommended that core programs may be best administrated from the state level and facilitated by the local 4-H program leaders. And that specific special interest clubs be determined by local 4-H program leaders; administered and facilitated by the local 4-H leader to ensure that specific needs of local youth are being met by the local program.

4. Parental support

4-H members also recognized that parental support was an important factor in continuing to participate in 4-H. No other single individual has a greater influence on a child's development than their parents; ultimately controlling the youth's schedules, resources, and activities. Achieving parents' support for the program is critical, and participatory approaches should be implemented. For example, during an introductory 4-H club meeting, facilitate a roundtable discussion with parents concerning their child's 4-H experience. As gate keepers in this process, inviting input from these stakeholders is vital.

Further Data Collection

More research is needed to further understand the variables influencing 4-H club enrollment and retention. Focus groups with current 4-H members could help determine changes that

need to be made to retain more youth in the 4-H program. These focus groups could be made up of the officers of each of the middle and high school clubs in the form of a county council or youth advisory committee. This would provide 4-H members with the leadership and responsibility roles they desired (as found in this study and elsewhere).

Another focus group method could be to follow up with the 4-H members who continued with the program by asking questions about reasons for staying, parental involvement, and propensity of leadership opportunities. Answers to these questions would help 4-H staff determine the most effective methods for retaining 4-H members in the future.

Another option could be to develop and implement more opportunities for middle school 4-H members, especially 6th grade 4-H'ers, who dropped out waiting to be eligible for Junior 4-H activities. Since fun and camp trips were given as reasons for returning to the program in following years, more trips that incorporate fun, learning, positive youth-adult partnerships, and overnight residential experiences should be offered.

4-H leaders should increase marketing efforts in schools and communities by encouraging 4-H members to recruit their friends, following up with members who miss meetings, providing information to youth and parents about the benefits of 4-H, and participating in more community activities including festivals and parades. These efforts would help remind 4-H members and the community that 4-H is still available to middle and high school students.

Additional research is needed to determine if focus on fun, schedule considerations, community based programs, or parental support have the greatest effect on youth participation and retention in 4-H programs. Anecdotal evidence suggests that there is no single answer to the question of how to increase 4-H member enrollment and participation. More sophisticated research design models and statistical analysis are needed to isolate the role each variable plays, identify multiple variable interactions, and create a prioritized list of actions that 4-H leaders can implement to increase youth participation and involvement.

According to the Harvard Family Research Project (Lauver, Little, & Weiss, 2004) which studied over 40 out-of-school time (OST) programs including Big Brothers/Big Sisters of America and Boys & Girls Clubs of America, low attendance is the norm in many OST programs for middle and high school youth. This is due to busy schedules and family lives, claims of boredom, or the desire for freedom. Their study also looked into the incentives and barriers to participation and made similar recommendations as this study, including helping youth understand the value of participation, showing families the opportunities associated with participation, matching program goals to participant needs, considering at-risk youth in recruitment efforts, recruiting friends to join together, hiring program staff that can relate to youth, linking academics to an engaging project, and giving high school youth extra opportunities.

In fact, youth often participate in more than one activity and need to have the opportunity to have a variety of options to choose from (Theokas, Lerner, Phelps, & Lerner, 2006). Youth will often change their mind about what they want to participate in and the youth development program must work to recruit and retain youth by promoting their program and providing options which meet youth needs and desires. The results of this study offer guidance for youth development professionals hoping to enroll and retain youth in educational activities and programs.

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Journal of Youth Development
Bridging Research & Practice

Using Poverty Simulation for College Students: A Mixed-Methods Evaluation

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602PA001**

Using Poverty Simulation for College Students: A Mixed-Methods Evaluation

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Abstract: This paper speaks to the potential for simulation and experience-based educational programs in delivering changes in knowledge, attitudes and behaviors, as well as the utility of mixed-methods approaches to program evaluation. The authors discuss a mixed-methods study which evaluates the impact of a poverty simulation program on college students at three Midwestern universities. Findings suggest multiple benefits of the experience, including changes in attitudes and beliefs about how serious the experience of poverty can be, an understanding that poverty is complex and can be caused by multiple factors, and a decrease in their biases and stereotypes about people in poverty. Qualitative findings corroborate these data.

Introduction

Community Action Poverty Simulation© (CAPS) is a unique tool that agencies use to educate participants about the day-to-day realities of people living with limited resources. Simulation activities, because of their experiential and hands-on nature, can be a very effective and powerful way for participants to gain a host of skills and insights, particularly for children and adolescents (Adams, 1973; Lehtola, 2007). This simulation takes approximately three hours and participants role-play the lives of low-income families. The task is for participants to 'survive' financially – navigating institutions, acquiring basic necessities, and tackling occasional hurdles that many families in poverty face (e.g., child becomes ill). While this simulation has been used in many settings, the systematic evaluation of its effectiveness among college students through multiple sources of data is lacking.

The current evaluation study was conducted with college students who were in CAPS as part of a general education class. During the simulation, each participant was given an identity (e.g., Joan, mother) and assigned to one of up to 26 limited-resource households. Each person within that household had to work together to obtain and allocate the necessary resources to survive each 15 minute interval which represented one week in their lives. Each family was given a

certain amount of resources (e.g., cash, bus passes) with some families having more than others. Participants also interacted with community services, agencies and businesses from which they could either gain more resources (e.g., borrow money from the bank, obtain food stamps, sell to the pawnshop) and/or purchase and pay for needs (e.g., grocery store, utility company). One volunteer periodically and randomly distributed cards that represented unforeseen circumstances, for instances, the 'sick child' card meant that one of the adults in the family/group had to sit out a portion of the interval (representing having to stay home with the sick child) to care for the child. This resulted in being unable to get a full week's pay, having less time to buy groceries and pay utilities, and fulfill other necessities. A family that received the card indicating that their car was broken had to give out a portion of their money to purchase bus passes. At the end of each interval, each family was asked to examine how well they did in covering their basic needs. Upon the end of four 15-minute cycles, participants completed the post-test evaluation and joined a de-briefing and sharing of their experiences and thoughts.

The reported mixed-methods study is an independent evaluation of the program and assesses its effectiveness in bringing about belief and attitude change among college students. Because many college students show a low level of financial literacy and have an increasing amount of debt (Norvilities, Osberg, Young, Merwin, Roehling & Kamas, 2006), they are a priority population for this type of program. Financial decisions and good financial management are crucial for youth to be effective contributors to the well-being of the community and national economy (Spencer, Petty, Stimpson, Dees & Riley, 2003). Furthermore, the students in this study were enrolled in programs in which they were training to work with families and youth in the community and as such it was essential that they learned about the experience of poverty. A mixed-methods approach was utilized in order to gather multiple sources of data and to establish a comprehensive evaluation of the program (Creswell & Plano Clark, 2007).

Methods

Participants of this study were 509 college students from three Midwest universities. Preliminary analyses indicated no systematic differences in the demographic and survey data across schools, thus, data were collapsed across universities. Majority described themselves as Caucasian (92%), 2.6% as African American, 2.5% as Hispanic, and 2% as Asian. Participants had a mean age of 21.82 years (SD=8.99). Students participated in the poverty simulation program as part of a class activity in a general education course.

The Poverty Simulation program package includes a 16-item survey that is used to assess participants' attitudes and beliefs regarding poverty. This measure was given immediately prior to and after the activity. The post-test survey also included two qualitative questions that asked what insights they had gained and what actions they planned to take as a result of their experience.

Results

Quantitative data

Factor analysis with varimax rotation was conducted to examine the properties of the 16-item survey. Analyses yielded four factors explaining 48.89% of the variance. Repeated measures ANOVA were then conducted to compare pre- and post-test scores on those factors, with

results summarized in Table 1. Results show that students gained attitude change in three of the four sub-scales.

Table 1

Descriptive statistics and results of within-groups comparisons

	Percent of variance accounted for	Pre-test Means(SD)	Post-test Means(SD)	Results of repeated measures ANOVA
Severity of poverty: Poverty is not a serious problem and poor people get enough help.	15.16%	2.32(.53)	2.11(.65)	$F(1,569) = 85.32^{***}$, $MSe = (.16)$
Self responsibility: Poverty is simply the fault of poor people.	13.80%	2.76(.64)	2.54(.70)	$F(1,569) = 95.98^{***}$, $MSe = (.16)$
Bad habits: Poor people have bad habits	10.84%	2.18(.78)	1.91(.79)	$F(1,569) = 16.70^{***}$, $MSe = (.27)$
The toll poverty takes: Poverty takes an emotional toll	9.09%	3.44(.67)	3.38(.82)	$F(1,569) = 2.10$, $MSe = (.25)$ (no significant change)

*** p<.001 Note: participants did not score significantly differently between pre- and post-tests for the final scale

Qualitative data

Qualitative responses were coded using a typological approach which entailed collapsing similar responses and then further combining categories with similar ideas. This allows researchers to reflect on the ways people discuss particular topics, seek relationship in their responses, and to develop the scope of their experience (Morse & Richards, 2002). Two independent coders (graduate students) undertook the analysis and compared their findings to provide data validity and triangulation. In order to check for reliability, a second pair of coders (two undergraduates) independently coded the data following the coding protocol which resulted in agreement in findings. A fifth and final independent researcher compared results from the first and second set of codes, and then to the entire corpus of responses. Results were as follows (sample responses in parentheses):

Question 1: What did you learn from this experience?

- Living in poverty is difficult

  ("Being poor is difficult and it is even harder to get out of poverty!")
- Living in poverty is emotionally hard and stressful

  ("I'm just shocked at the stress of it all. I have a headache, and I was not even the one budgeting money.")
- Increased empathy and understanding for the less privileged.

  ("I have learned that poor people do work hard and that they often are in a cycle that is difficult to change. They are not poor because of their faults.")
- There is help for people in poverty but not enough

  ("You really have to take advantage of the resources that you do have"; "There should be more programs to help people.")

Question 2: Has this workshop encouraged you to take action on anything or make changes in your life?

- Motivated to act to avoid ending up in poverty by studying harder, finding work, budgeting better

  ("It has made me want to get a good education.")
- Help others who are in need

  ("I want to give to charity now whenever I can afford to … some kind of help for the homeless.")
- Be more thankful for what one has

  ("Be appreciative because people get by with much less.")
- Want to help, just don't know how yet

  ("I would love to help people more but I feel like I can't help. I am just out of school - I have massive debt.")

Conclusions and Implications

While this evaluation study utilized a short-term pre- and post-test design, results suggest multiple benefits of the poverty simulation experience for college students. Quantitative findings indicate that participants changed their attitudes and beliefs about how serious the experience of poverty can be, how poverty is not purely a result of people's own doing (e.g., being lazy), and decreased their biases against people in poverty, specifically that people in need exhibit many bad habits. Qualitative findings corroborate the quantitative data and suggest that participants displayed increased knowledge about the challenges that low-income families face, and that they had an increased amount of empathy for those in need. Participants also indicated that they were motivated to change their behaviors, for instance, expressing a desire to act in ways that would help them avoid poverty in the future, as well as to find ways to help those in need.

Findings support scholars' assertions regarding the potential for simulation and other experience-based educational programs in delivering changes in knowledge, attitudes and behaviors. In this poverty simulation program, participants experience to some degree, the difficulties that low-income people typically undergo, and are tasked with trying to solve issues similar to what people in need have to deal with on a daily basis. These experiences appear to be effective in reaching the goals of the program.

Simulations have been shown to be effective in a variety of areas, including training adolescents to deal with issues related to suicide (Kalafat, & Gagliano, 1996), practicing decision-making in situations surrounding teen pregnancy (Condon, Corkindale, Russell, & Quinlivan, 2006) as well as in learning about conflict resolutions and negotiation (Kifer, Levis, Green, & Phillips, 1974). Simulation exercises, wherein participants are actively engaged in problem solving and in practicing other skills, can be an effective way for youth to gain practical information in a hands-on manner and can be incorporated in many programs (Lehtola, 2007). By employing exercises wherein youth can practice skills in the context of real life scenarios, learning can become more meaningful.

Finally, findings highlight the potential for the mixed-methods approach for program evaluation. While the quantitative data showed numeric and measurable changes in scores on specific outcomes, the qualitative data provide a rich illustration of the experiences, thoughts, and

feelings of students undergoing the simulation. Together, these methods complement each other and provide a more comprehensive picture of program impact.

Acknowledgement:
The authors would like to thank the UNL Extension Educators who conducted the simulation – Marilyn Fox, Carla Mahar, Mary Nelson, and Ruth Vonderohe; as well as the students and volunteers who participated in the exercise.

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Journal of Youth Development
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Parental Perceptions of Participation in 4-H Beef, Sheep and Swine Livestock Projects and the Fostering of Life Skill Development in Youth

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602PA002**

Parental Perceptions of Participation in 4-H Beef, Sheep and Swine Livestock Projects and the Fostering of Life Skill Development in Youth

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Abstract: Beef, sheep and swine 4-H youth livestock projects have a great deal of hands-on learning opportunities for members. However, what are parents' perceptions about livestock projects and the development of life skills? The purpose of this research effort was to determine the life skill development gained by 4-H members participating in 4-H beef, sheep or swine projects in West Virginia. A total of 207 caregivers offered insight into the study and answered life skill development questions. These questions were related to decision making, relating to others, developing and maintaining records, accepting responsibility, building positive self esteem, self motivation, knowledge of the livestock industry, developing organizational skills, problem solving, developing oral communication skills, setting goals, developing self-discipline, and working in teams. The findings of this study provide positive insights into the relationship between the development of valuable life skills and 4-H beef, sheep and swine projects.

Introduction

4-H, the largest informal youth organization in the world, promotes hands on learning opportunities for its members that instill life skills. 4-H also recognizes and rewards members for their hard work and perseverance. However, it is important to look past ribbons, trophies, trips, and monetary gains and examine the life skills that are being developed as a direct result of participation in livestock projects. The 4-H youth livestock projects prove to have a great deal of hands-on learning opportunities for members. However, what are parents' perceptions about livestock projects and the development of life skills? Do parents feel that 4-H beef, sheep or swine projects are directly linked to their child's development?

According to Boleman, Briers, and Cummings (2004), the parents of youth participating in the 4-H beef project did suggest that life skills are being enhanced. They also indicated that there is indeed a low to moderate positive relationship between years of participation and life skill development. According to Boyd, Herring, and Briers (1992), the development of life skills through experiential learning is the cornerstone of the 4-H program. The literature proves that many studies have been executed finding that youth do gain life skills through 4-H livestock projects. Building responsibility, relating to others, spirit of inquiry, decision making, public speaking, maintaining records, and building self esteem are the seven life skills that Ward's (1996) study of 4-H alumni revealed as the skills built through 4-H participation.

Purpose and Objectives

The purpose of this research effort was to determine the life skill development gained by 4-H members participating in 4-H beef, sheep, or swine projects in West Virginia. This was measured by asking parents/caregivers to address the life skill development of the child.

The objectives were:

1. Determine the life skills gleaned by youth participation in 4-H livestock projects as addressed by their parents/caregivers.
2. Measure the relationship between individual life skills and years of youth participation in 4-H livestock projects as addressed by their parents/caregivers.

Methods and Procedures

This research effort was approved by the Institutional Review Board-Human Subjects in Research, West Virginia University for exemption. The target population was defined as parents of 4-H youth participating in 4-H livestock projects. West Virginia's fifty-five counties with 4-H programming were invited to participate in the research study. A 10% random sample was drawn from the fifty-five counties.

Constructed to discover the perceived life skills gleaned from youth participation in 4-H livestock projects, a mailed questionnaire was used to collect the data. The following life skills were measured as part of the instrument:

1. Decision making
2. Ability to relate to others
3. Develop and maintain records
4. Accepting responsibility
5. Build positive self esteem
6. Self motivation
7. Knowledge of the livestock industry
8. Develop organizational skills
9. Ability to problem solve
10. Develop oral communication skills
11. Setting goals
12. Develop self-discipline
13. Work in teams

The instrument was developed by Boleman et al. (2004) but modified and updated with input from 8 West Virginia University faculty members (See Appendix A). More specifically, these faculty members included: members from the Extension Agricultural and Natural Resources program center, members from the 4-H Youth Development program center and members from Family and Consumer Sciences program center. As suggested by Boleman et al. (2004) and Gall et al. (1996), face and content validity were assessed by these 8 individuals.

Parents/caregivers were asked to offer their perceptions of the level of life skill development as a result of their child raising a 4-H livestock project. The scale was slightly modified from the Boleman et al. (2004) instrument and was defined as *Not influential at all, Mildly influential, Moderately influential, Highly influential,* and *Essential*. The years of youth participation and demographic information followed in the second instrument section.

Eleven junior 4-H leaders from Jefferson County were utilized to pilot the research tool and assess for research face validity. Three noted there was confusing wording in the demographic section. Additionally, the eleven junior 4-H leaders were asked to complete the instrument and return it to the investigator with only the provided instructions. Reliability, or internal consistency, of the life skill development scale was estimated from these data.

Data Analysis

Demographics:

The respondents were asked to provide how many years their child had been exhibiting livestock projects; the age and gender of their child; the number of livestock shows in which their child exhibited from January 2006 – August 2006; the number of hours their child had spent working with their livestock project(s) per week from January 2006 – August 2006; and the number of years their child had been in the 4-H program.

Of the 207 parents that responded, two did not provide the number of years their child had been exhibiting livestock projects; six did not provide the number of shows in which their child had exhibited from January 2006 – August 2006; two parents did not provide the number of hours their child worked with their livestock project(s); and three did not provide the number of years their child had been involved with the 4-H program.

Two hundred and five parents (99.0%) reported that their children have been exhibiting for an average of 4.74 years with a range from 1 to 16 years. The mean age of the children was 13.75, a range from 6 to 24 years old. Ninety-three (44.9%) male children and 114 (55.1%) female children's parents responded to the questionnaire.

Two hundred and one (97.1%) parents provided data on the number of shows in which their child exhibited from January 2006 – August 2006. Three parents (1.4%) responded that their child had not showed at a livestock exhibition as a 4-H member to date. One hundred –seventy two (85.6%) parents/caregivers stated that their child had participated in one to four livestock shows between January 2006 and August 2006, with a range of zero to 16 shows.

An average of 9-12 hours was stated to have been spent working with youth livestock projects per week from January 2006 – August 2006. The mean 4-H membership year was 5.30 (11.3%), with a range from 2 to 16 years.

Rating of Life Skills:

Parents' Perceptions of Life Skills Gained from Youth Exhibiting Livestock Projects

Objective 1:

*Parents rated their child's livestock experience on a 5 point scale as follows: 1=Not influential at all, 2=Mildly influential, *3=Moderately influential, *4=Highly influential, *5=Essential* N= 207

Life Skill	***Moderately Influential and above***
Decision Making	95%
Ability to Relate to Others	93.7%
Develop and Maintain Records	94.2%
Accepting Responsibility	99.5%
Build Positive Self Esteem	97.6%
Self Motivation	97.1%
Knowledge of Livestock Industry	94.7%
Develop Organizational Skills	97%
Ability to Problem Solve	94.2%
Develop Oral Communication Skills	88.9%
Setting Goals	97.6%
Develop Self Discipline	95.5%
Develop Self Motivation	96.6%
Work in Teams	91.8%

****Moderately influential, Highly Influential and Essential were totaled to determine life skill impact.***

►In further examination of the chart above, one observes that impact is significant in the development of life skills when assuming a 4-H livestock project. As indicated in the chart, all life skill categories are consistently.

*Parents rated their child's 4-H livestock experience on a 5 point scale as follows: 1=Not influential at all, 2=Mildly influential, *3=Moderately influential, *4=Highly influential, *5=Essential*

Life Skill	***Highly Influential and above***
Decision Making	70.4%
Ability to Relate to Others	67.6%
Develop and Maintain Records	80.2%
Accepting Responsibility	91.8%
Build Positive Self Esteem	83.6%
Self Motivation	83%
Knowledge of Livestock Industry	79.2%
Develop Organizational Skills	69.2%
Ability to Problem Solve	63.3%
Develop Oral Communication Skills	58.3%
Setting Goals	81.1%
Develop Self Discipline	79.2%
Develop Self Motivation	82%
Work in Teams	66.7%

* ***Highly Influential and Essential were totaled to determine life skill impact.***

►One observes that impact proves to be very high in all categories in life skill development. These categories are consistent and high due to increased activities encompassed when assuming a 4-H livestock project.

►Accepting responsibility, with 91.3%, proves to be very high. Raising a 4-H livestock project increases the level of daily work. Daily activities consume a large amount of time and can include walking the animal and maintaining a feeding program.

►Develop oral communication skills proves to be the lowest life skill developed, but is still significant at 58.3%. This could be low because 4-H members do not practice oral skills in the livestock fair arena. An oral project demonstration takes place in the 4-H club setting. Senior 4-H members further develop communication skills by giving oral reasons during livestock judging events.

Correlation of Life Skills and Demographics:

Objective 2:
Correlation was calculated utilizing a grand mean of the life skills and the individual demographics. Pearson's correlation is used to find the correlation between at least two continuous variables. Correlation was calculated for the grand mean of life skills and the individual demographics. The value for a Pearson's can fall between 0.00 (no correlation) and 1.00 (perfect correlation). Other factors such as group size will determine if the correlation is significant.

Demographic	***N***	***Pearson Correlation***	***Significant (2-tailed)***
How many years has your child been exhibiting livestock projects?	189	0.185	**0.11***
How old is your child?	190	0.144	**0.048***
What is the gender of your child?	190	0.170	**0.019***
How many shows did your child exhibit livestock animals in from January 2006 thru August 2006?	184	0.204	**0.005****
How many hours did your child spend working with his/her livestock project(s) per week from January 2006 thru August 2006?	188	-0.042	0.570
How many years had your child been in the 4-H program?	187	0.186	**0.011***

*Note: *Significant|2-tailed – significant if < .05.*
**Note: *Significant|2- tailed – significant if < .01.*

►The highest ranking life skill, Accepting Responsibility, did not significantly correlate with any of the demographics. The lowest ranking life skill, Develop Oral Communication Skills, did have a significant correlation with years of 4-H membership and years of exhibiting livestock animals.

►The following tables show the significant correlation relationship between the individual life skills and the demographics.

How many years has your child been exhibiting livestock projects?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Decision Making	201	0.163	**0.021***
Knowledge of Livestock Industry	205	0.175	**0.012***
Develop Oral Communication Skills	204	0.145	**0.039***
Develop Self Discipline	200	0.152	**0.032***

*Note: *Significant|2-tailed – significant if < .05.*

How old is your child?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Knowledge of Livestock Industry	207	0.146	**0.036***

*Note: *Significant|2-tailed – significant if < .05.*

What is the gender of your child?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Ability to Relate to Others	207	0.142	**0.041***
Develop and Maintain Records	204	0.188	**0.007****
Develop Organizational Skills	205	0.165	**0.018***
Work in Teams	207	0.147	**0.035***

*Note: *Significant|2-tailed – significant if < .05.*
**Note: *Significant|2- tailed – significant if < .01.*

How many shows did your child exhibit livestock animals in from January 2006 thru August 2006?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Ability to Relate to Others	201	0.141	**0.047***
Develop and Maintain Records	198	0.140	**0.049***
Self Motivation	199	0.152	**0.032***
Develop Organizational Skills	199	0.178	**0.012***
Ability to Problem Solve	201	0.206	**0.003****
Setting Goals	200	0.150	**0.034***
Develop Self Discipline	196	0.196	**0.006****
Develop Self Motivation	200	0.185	**0.009****

*Note: *Significant|2-tailed – significant if < .05.*
**Note: *Significant|2- tailed – significant if < .01.*

How many hours did your child spend working with his/her livestock project(s) per week from January 2006 thru August 2006?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Self Motivation	203	-0.207	**0.003****

**Note: *Significant|2- tailed – significant if < .01*

►The relationship between hours spent working with the livestock project and self motivation is as follows: as self motivation increases, less time is spent working with livestock project.

How many years had your child been in the 4-H program?	***N***	***Pearson Correlation***	***Significant (2-tailed)***
Decision Making	200	0.154	**0.029***
Knowledge of Livestock Industry	204	0.213	**0.002****
Develop Oral Communication Skills	203	0.154	**0.028***
Develop Self Discipline	199	0.142	**0.046***

*Note: *Significant|2-tailed – significant if < .05.*
**Note: *Significant|2- tailed – significant if < .01.*

Conclusion

Parents participating in this research endeavor noted that life skills are being positively enhanced by participation in the 4-H beef, sheep or swine project. The demographics and life skills correlation maintains the findings of Boleman, Briers, and Cummings (2004) that the longer children actively engage in the 4-H beef, sheep or swine project, the more likely they are developing positive life skills. Because of this life skill development, 4-H is playing a major role in the cultivation of productive and contributing members of society.

It is commonly stated that 4-H programming increases life skill development in our youth; however, most 4-H professionals cannot state the exact life skills honed through various 4-H activities. This study strived to investigate the life skills that livestock programming, specifically beef, sheep and swine 4-H projects, cultivate in youth. According to the parents that participated in the study, the life skills that revealed significantly high correlation included: Accepting Responsibility, Building Positive Self Esteem, Self Motivation, Setting Goals, and Developing Organizational Skills.

These results proved to be powerful and significant to our youth development work. As agents of positive change, it is our responsibility to focus on the development of life skills and what 4-H projects, programs, etc., foster their development. While this research was designed for a target group of individuals, we know that positive youth development is occurring through involvement in beef, sheep and swine 4-H projects. Because the development of these life skills among members is the ultimate goals, we must further examine other 4-H projects and strive to determine if life skill development is occurring.

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Appendix A

Parents' Perceptions of Life Skills Developed by Participation with 4-H Youth Livestock Projects

Evaluation 2006

_____County

I. Life Skills Gained from Youth Exhibiting Livestock Projects

The major objective of this study is to assess the characteristics gained from youth exhibiting livestock projects. Please provide a response for the following skills.

Rate the level of influence livestock showing has on the following life skills listed below. Please place an "x" in the most appropriate box for each skill.

LIFE SKILLS	***Not Influential at all***	***Mildly influential***	***Moderately influential***	***Highly influential***	***Essential***
Decision Making					
Ability to Relate to Others					
Develop and Maintain Records					
Accepting Responsibility					
Build Positive Self Esteem					
Self Motivation					
Knowledge of Livestock Industry					
Develop Organizational Skills					
Ability to Problem Solve					
Develop Oral Communication Skills					
Setting Goals					
Develop Self-Discipline					
Develop Self Motivation					
Work in Teams					

II. Background Information

Please place the most appropriate response in the blank.

1. **How many years has your child been exhibiting livestock projects? _____**
2. **How old is your child? _____**
3. **What is the gender of your child?**
   ____ Male OR ____ Female
4. **How many shows did your child exhibit livestock animals in from January 2006 thru August 2006?**
   ____ 1-4 Shows ____ 13-16 Shows
   ____ 5-8 Shows ____ 17-20 Shows
   ____ 9-12 Shows ____ More than 20 Shows
5. **How many hours did your child spend working with his/her livestock projects(s) per week from January 2006 – August 2006?**
   ____ 1-4 hours per week
   ____ 5-8 hours per week
   ____ 9-12 hours per week
   ____ 13-16 hours per week
   ____ 17-20 hours per week
   ____ More than 20 hours per week
6. **How many years has your child been in the 4-H program? _____**

Thank you so much for your time! Please return the completed questionnaire to your Extension Agent.

Journal of Youth Development
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Projects in a Day Develop Life Skills in At-Risk After School Youth

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602PA003**

Projects in a Day Develop Life Skills in At-Risk After School Youth

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Abstract: As budgets tighten and school weeks are shortened more youth are being left unattended at home. Rural youth are particularly affected by these reductions and stranded away from programs and resources. At-risk youth are acutely impacted as they lose contact time with programs that provide life skill development and a safe place for youth to connect to community, other youth and adults. 4-H Projects-in-a-Day can provide curriculum in partnership with after school programs that develop life skills and build positive social skills. In a study conducted with an Idaho After School program during the 2007-2008 and the 2008-2009 school years, six of the 12 life skills evaluated showed a significant increase after participation. Youth also reported positive self esteem and made new friends during the events held on Fridays. 4-H Project-in-a-Day curriculum has shown to be a powerful, ready to use tool in after school programming.

Introduction

School districts across the country are meeting economic challenges by reducing the school week to four days. Over 120 school districts have implemented shortened school weeks (Turner, 2010), lengthening the school day to make up for the reduced instruction days.

However, this strategy may be resulting in another problem, youth left unattended on out of school days. This is a particular problem in the rural United States as many rural parents are not home and youth are stranded away from other resources and programs (Letiecq, Bailey & Keller, 2007). Youth left unsupervised for a long day are at risk of negative behavior choices with adverse consequences to themselves and their community. Youth are engaged in more positive behavior when they are connected to parents, family, school, community, and places of worship (White House, 2005).

4-H curricula are particularly well suited to many out-of-school youth programs. 4-H curriculum not only reduces risky behavior but builds life skills. 4-H has expanded to include the popular Project in a Day format, in which youth complete all project requirements in one day. In 2006 the National 4-H Headquarters reported that 168,808 youth in the Western United States participated in short

term 4-H projects such as Projects in a Day -- eleven times greater than traditional Overnight Camp enrollment at 15,203 youth and 25,535 youth who were enrolled in Day camping projects (National 4-H Headquarters, 2006). Projects-in-a-Day have great potential for after school programs, and may be the only option for some youth to participate in 4-H (Lemhi County 4-H, 2007). They are particularly well suited to the full-day youth program challenges faced by the many communities with shortened school weeks.

In 2007 the Salmon, Idaho School District adopted a four day school week. Youth attend school Monday through Thursday, greatly impacting youth attending the Lemhi's After School Promise Program (LASP). These youth are already considered at-risk, having been referred to the program by teachers, counselors, law enforcement personnel, administrators and/or domestic violence and family service personnel. The school schedule change reduced LASP program contact time with youth from 10 hours to six hours each week. LASP youth are not released from school until 4:00pm, an hour later than under the past school programming. Contact time is reduced by one hour each day greatly reducing the youth's opportunities to participate in a program offering life skill development and prevention curriculum. Positive adult interaction and enrichment activities outside of homework are limited as well.

Lemhi's After School Promise functions as a 501(c)3 non-profit and operates independently of the school district. The program operates on grant funding from several organizations promoting drug and alcohol preventions curriculum, academic improvement and life skill development. Three instructors, including two certified teachers, provide programming and healthy adult interactions during contact time.

Fabulous 4-H Friday Program

A partnership with Lemhi's After School Promise, Lemhi County 4-H and University of Idaho Extension was formed to meet the needs of the at-risk youth and reduce risky behavior on Fridays. 4-H after school programs build positive social skills, offers positive alternatives to anti social behavior and support parents in care giving (Bunnell & Pate, 2006). Furthermore, the program provides life skill development and a safe place for youth to connect to community, other youth and adults. Since the youth attending on Fridays varied each week, a traditional project was not feasible and often did not hold the youth's interest. The Partnership selected 4-H curriculum to utilize in the Friday "Project in a Day" Program. 4-H curriculum is already developed, tested for effectiveness and inexpensive to obtain. The incorporation of a 4-H Project in a Day met the LASP prevention and enrichment goals and encouraged youth participation.

During the 2007-2008 and 2008-2009 school years, 4-H and the LASP offered a series of Projects-in-a-Day held every other Friday during both Fall and Spring LASP programming. Seven events were held in the 2007-2008 school year and six events during the 2008-2009 school year. The program was called "Fabulous 4-H Fridays" and was possible with assistance from several grants totaling $1500. Events included five hours of contact time with youth, a lunch provided by LASP and a 4-H project. Lunch was provided at no cost to youth that qualified for the free and reduced lunch program. The 4-H Project in a Day consisted of a basic introduction to the project, a modified record book, a short demonstration and a service learning project. A $10.00 fee was requested for each event but all youth received scholarships through LASP, or Lemhi County 4-H. Over 28 individual youth attended the program with and average of 12 participants at each event.

Why Projects in A Day Work

The Project-in-a-Day format offered youth exposure to 4-H's fundamental goal of life skill development while developing project specific skills. 4-H curriculum is based on 34 life skills and

developed by professionals in youth development (Hendricks, 1996). The Life Skill Model emphasizes learning by doing. Programming and curriculum is designed to "provide opportunities for youth to experience life skills, to practice them and be able to use them throughout their lifetime" (Iowa State 4-H, 2007, p.1)

The shortened format allowed youth to experience the 4-H project in a few hours, learn basic skills and determine if the project was something of interest to them. Youth were able to try projects they may never have signed up for, including theatre or Making the Most of Me. Within a day, youth complete a project, finish a record book and give a demonstration, all essential elements of the 4-H experience (4-H Delivery Modes, 2002). Each Friday session began with a brief overview of the topic to be covered for the day. Youth were then able to build goals for the day and record then in their record books. Following a formal discussion on the topic youth participated in hands on learning activities including acting exercise, seed starting and rocket building. Youth took lessons learned from hands on learning experiences and prepared a presentation for the group. During the presentation public speaking skills are built as youth share what they learned with others. Completion of record books follow the demonstration portion of the "Project in a Day" programming. In addition, youth complete a service learning project. Based on the National 4-H Experiential Learning Model, 4-H curriculum is designed to let youth experience, reflect on that experience and apply that knowledge to other life situations (Diem, 2001). Even though Projects in a Day are shortened versions of traditional 4-H projects they still retain the necessary pieces to follow the experiential learning model and develop life skills.

Methods

Evaluation of the Fabulous 4-H Fridays "Project in a Day" program consisted of a pre- and post-test survey and a personal interview. The pre-test surveys provided a basal level of life skills before the event to compare to life skills after the event. The pre- and post-test surveys were researcher designed survey instruments with 12 quantitative questions, each addressing a specific life skill – see Table 1 for the 12 skills and questions included. The surveys used a rating system from one to five, with one being "Very Poorly," two being "Not so Well," three being "OK," four being "Very Well" and five being "Excellent."

The interview portion of the research was conducted after the service learning project during the 2007-2008 school year. Two youth were randomly selected from each session through an identification number system, for a total of 15 youth interviewed. The interview was conducted by the researcher. Each interviewed youth was asked 12 quantitative researcher designed questions. The questions are similar to the ones on the pre-test and post-test surveys. The questions focused on specific events during the activity, for example "Did you finish your record book today?" Some of the questions were open ended, for example "How did you feel about yourself today?" Youth were read the questions and the researcher wrote the youth's answers verbatim.

Impacts

Evaluation results for the program showed that at-risk youth participating in the Fabulous 4-H Friday program received life skill education and learned project specific skills while participating in the program. In a pre-then-post survey conducted during the 2007-2008 and 2008-2009 school year 11 of the 12 life skills evaluated increased.

The following six life skills showed a statistically significant increase through participation:

- Wise Use of Resources
- Record Keeping
- Problem Solving
- Decision Making
- Contributions to Group Effort
- Marketable Skills

Five life skills showed a slight but not a significant increase:

- Goal Setting
- Learning to Learn
- Leadership
- Teamwork
- Self Motivation

The Community Service life skill showed a decrease in confidence levels. Confidence levels of an average of 4.5 were recorded in pre test. The post test average dropped to 4.28. This was not a statistically significant difference and may be contributed to self reporting error. The interview data collected also reflected that a reporting error may have occurred. Each youth interviewed was able to state a specific way they helped others during the day and ways they could help in the future.

During interviews with participants, 80 percent reported a positive response when asked if they completed the record books, learned a specific skill or helped others. Eighty percent shared a specific skill they had learned and a way they had helped someone else. Ninety-three percent of participant interviewed reported positive responses to a question assessing their ability to reach their goals for the event and also stated they had positive feelings about themselves while attending the Fabulous 4-H Friday events. Seventy-three percent shared a positive response when asked if they used their resources wisely while 67 percent said they contributed to group effort and were helped by others. Forty percent of youth reported a positive response when asked if they were a leader.

Table 1

Comparison of Means and t-tests N=72

Table 1. *Comparison of Means and t-tests*					
Life Skills	Confidence	Survey Questions	*M*	*SD*	*T*
Wise use of Resources	Pre-test	How well do you manage your time so that you can get things done?	4.07	1.28	4.30*
	Post- test	How well did you manage your time so that you could finish your project?	4.81	0.69	
Goal Setting	Pre-test	How hard do you work on things you do?	4.38	1.12	1.50
	Post- test	How well did you do on your project?	4.64	0.98	
Record Keeping	Pre-test	How well do you keep records?	3.12	1.73	4.60*
	Post- test	How well did you do on your record book?	4.29	1.28	
Learning to Learn	Pre-test	Do you learn new things?	4.51	1.15	-1.55
	Post- test	Did you learn new things?	4.76	0.74	
Problem Solving	Pre-test	How well do you work through problems?	4.18	1.27	2.29*
	Post- test	How well did you work through problems you had today?	4.60	0.88	
Decision Making	Pre-test	How well do you make decisions?	4.14	1.30	2.81*
	Post- test	How well did you make decisions about your project today?	4.67	0.92	
Community Service	Pre-test	How well do you help other people?	4.50	1.06	-1.11
	Post- test	How well did you help someone today during the project?	4.28	1.32	
Contributions to Group Effort	Pre-test	How well do you share your talents with others?	4.01	1.32	2.27*
	Post- test	How well did you share your supplies or give advice to others today?	4.47	1.10	
Leadership	Pre-test	How well do you lead groups?	4.11	1.38	-1.45
	Post- test	How well did you help lead the group?	4.43	1.25	
Teamwork	Pre-test	How well do you work with groups to finish activities?	4.53	1.15	1.19
	Post- test	How well did your group work together to finish the project?	4.72	0.77	
Marketable Skills	Pre-test	How well do you keep working on things until they are finished?	4.28	1.13	2.47*
	Post- test	How well did you keep working on your project until it was finished?	4.69	0.88	
Self Motivation	Pre-test	How well do you learn new skills?	4.40	1.12	-1.90
	Post- test	How well did you do learning new skills today?	4.71	0.78	
Note. Value Labels: 1=Very Poorly, 2=Not So Well, 3=OK, 4=Very Well, 5=Excellent *p<.05					

Nine interviewed youth reported they had made a new friend during the event and 5 youth shared that although they became angry during an event they were able to handle the situation. Each interviewed participant was able to state at least one specific community service they could perform to help someone else. Although the pre and post - test survey data did not reflect a statistically significant increase in the confidence level, the interview responses showed that there was an increase in awareness of the community service life skills.

The Fabulous 4-H Friday program provides 4-H Project in a Day programming that develops life skills in youth at risk as well as increasing youth's self esteem. We have been able to continue the program in 2009-10, and the program will continue in the Fall of the 2010-2011 school year.

Evaluation of the findings show 4-H curriculum as a viable partner in after school programming. Projects in a Day can provide an after school environment with important life skill development and healthy adult interaction. The short format fits nicely into afterschool programming where little prep time or contact time is available. The "learning by doing" structure" allows for hands on learning and reinforcement of skill development.

Recommendations

This ready to use curriculum is well suited to implement in school districts with shortened school weeks and provide youth with positive self growth. Almost any current 4-H project can be used in a Project in a Day format giving both, youth and instructors, flexibility to meet skill needs and interest. Including hands on learning experiences in which youth are actively engaged in learning, doing and reflecting will build life skills during almost any Project in a Day. Youth professionals are able to tailor Project in a Day programming to meet youth's interest while developing life skills in a shortened format.

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Journal of Youth Development
Bridging Research & Practice

Resource Review:
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2010 KIDS COUNT Data Book
State Profiles of Child Well-Being

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JOURNAL OF YOUTH DEVELOPMENT
bridging research and practice

Volume 6, Number 2, Summer 2011 **Article 110602RR001**

Resource Review:
The Annie E. Casey Foundation
2010 KIDS COUNT Data Book
State Profiles of Child Well-Being

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Abstract: The 2010 KIDS COUNT Data Book: State Profiles of Child Well-Being is an excellent resource for youth development professionals. The Data Book, prepared by the Annie E. Casey Foundation, provides national as well as state-by-state information on the conditions of America's children and families. Ten key indicators of child well-being are utilized for the state rankings. In addition, the book includes an Appendix highlighting 10 years of state-by-state rankings using key indicators of child well-being.

Introduction

Youth Development professionals looking for a compilation of data on children and families in the United States with state rankings will find the "2010 KIDS COUNT Data Book: State Profiles of Child Well-Being" (2011) to be particularly helpful. The resource is designed to provide ongoing benchmarks which show how states have regressed or advanced over time. Users of the resource will also be able to compare status of children in their states with those in other states.

The resource reports on key indicators of a child's well-being and compares data from 2000 and 2007/2008. The 10 key indicators reported in the study include:

- Percent low-birth weight babies
- Infant mortality rate (deaths per 1,000 live births)
- Child death rate (deaths per 100,000 children ages 1-14)
- Teen death rate (deaths per 100,000 teens ages 15-19)
- Teen birth rate (births per 1,000 females ages 15-19)
- Percent of teens not in school and not high school graduates (ages 16-19)
- Percent of teens not attending school and not working (ages 16-19)
- Percent of children living in families where no parent has full-time, year-round employment

- Percent of children in poverty (income below $21,834 for a family of two adults and two children in (2008)
- Percent of children in single-parent families

Comparative data is presented for the 10 key indicators including state-level maps of each indicator as well as the ten highest and lowest ranking states for each study.

Easy to use Tables and Charts highlight significant summary results. The individual state-level data is particularly valuable as youth professional prepare program justifications or funding proposals.

Limitation

While data for the key indicators is drawn from federal government statistical agencies it is important that readers recognize that many of the indicators are derived from samples and may contain some random error. Historical data for each state is available at the KIDS COUNT Data Center and may provide a clearer assessment of changes within a particular state.

Highlights

The 2010 KIDS COUNT Data Book also includes an Appendix featuring Overall Ranks from 2000 through 2008 for each state, using the same consistent set of indicators that are utilized in the 2010 report. Readers will find the charts particularly helpful in see how their state has improved on ranking over the past 10 years.

Obtain a Copy

The 60 page 2010 KIDS COUNT Data Book can be located at the Annie E. Casey Foundation website www.aecf.org. In addition, readers can access data quickly from iPhone, Blackberry or any Smartphone at Mobile.kids.count.org.

Website

The Annie E. Casey Foundation. http://datacenter.kidscount.org/DataBook/2010/Default.aspx